BBC

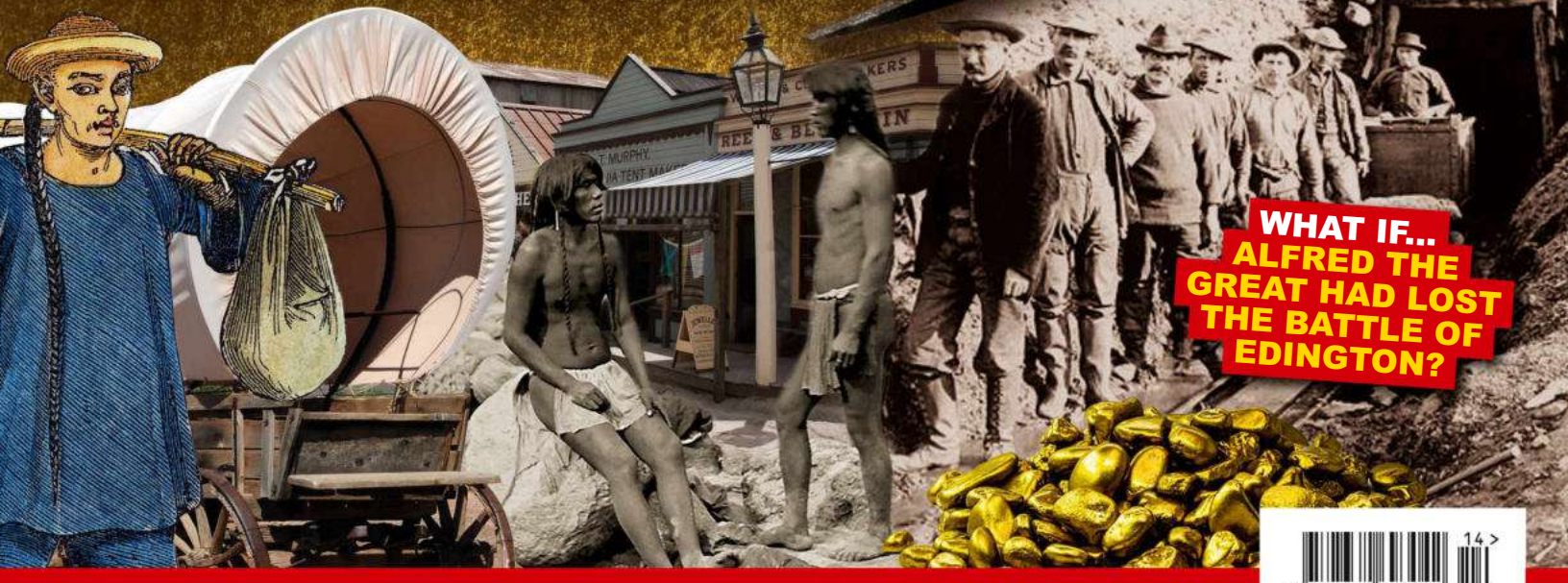
AFRICA'S FEMALE WARRIORS

HISTORY REVEALED

YOUR ESSENTIAL GUIDE TO THE

GOLD RUSH

From California to Australia, explore the story of the 19th-century race to get rich



WHAT IF... ALFRED THE GREAT HAD LOST THE BATTLE OF EDINGTON?

PLUS Why did Britain have a three-day week? Who was the Somerton Man?

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October Record Highlights*

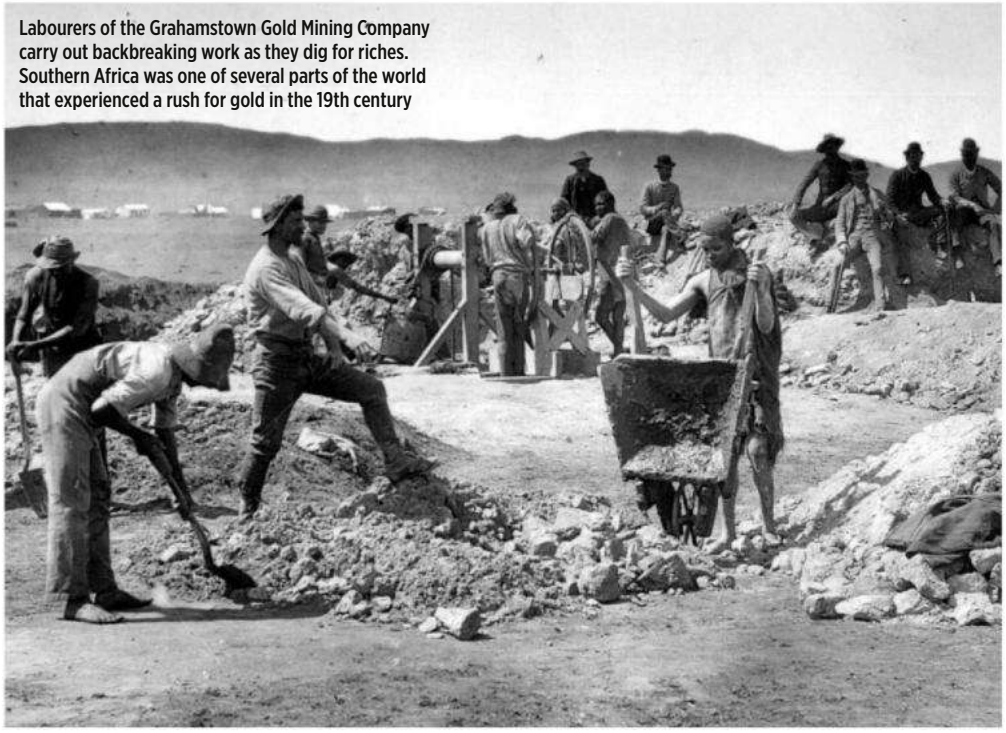
Missouri, U.S., Marriage Records, 1805-2002 – **UPDATED**

Queensland, Australia, Immigration Records: Passengers and Crew, 1852-1899 – **NEW**

Aube, France, Births, Marriages, and Deaths, 1572-1912 – **UPDATED**

*Record collections subject to change.

WELCOME DECEMBER 2022



Labourers of the Grahamstown Gold Mining Company carry out backbreaking work as they dig for riches. Southern Africa was one of several parts of the world that experienced a rush for gold in the 19th century

In the years that followed the discovery of gold near the town of Coloma in California, tens of thousands of fortune seekers from all over the world flocked to the area, desperate to get rich quick. But gold fever was not restricted to the US. **The second half of the 19th century saw gold rushes in Australia, Canada, Chile and even a mini rush in Scotland!** In this month's Essential Guide, we've enlisted the help of Dr Stephen Tuffnell to examine the myths and realities of the gold rush era – from conditions in the goldfields, to the impact that gold mining had on the environment and indigenous populations. Turn to page 27 to get started.

Elsewhere, **we look at the real history behind *The Woman King*, the recent historical epic about the Agojie** – the formidable all-female warrior army of the African kingdom of Dahomey (*page 50*), and ask what might have happened had Alfred the Great been defeated by the Vikings at the battle of Edington in AD 878 (*page 64*). And – ahead of a new Netflix film due for release in November – **we explore the strange and fascinating story of Sarah Jacob**, the young woman who, along with other so-called 'fasting girls' of the 19th century, claimed she could forgo food and water, and survive on her religious faith alone (*page 59*).

Also in this issue, we take a look at an artwork by Édouard Manet that challenges the rules of perspective (*page 56*), **investigate how London ground to a halt in the Great Smog of 1952** (*page 14*), and answer some intriguing historical questions (*page 67*).

See you next month!

Charlotte Hodgman
Editor

THIS MONTH'S BIG NUMBERS

>£1bn
The estimated worth of the 142 pieces that make up the Crown Jewels of the United Kingdom

1,000
The amount, in tonnes, of smoke particles that poured into the sky each day during the Great Smog of 1952

300,000
The estimated number of people who came to California during the gold rush era

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GOLD RUSH

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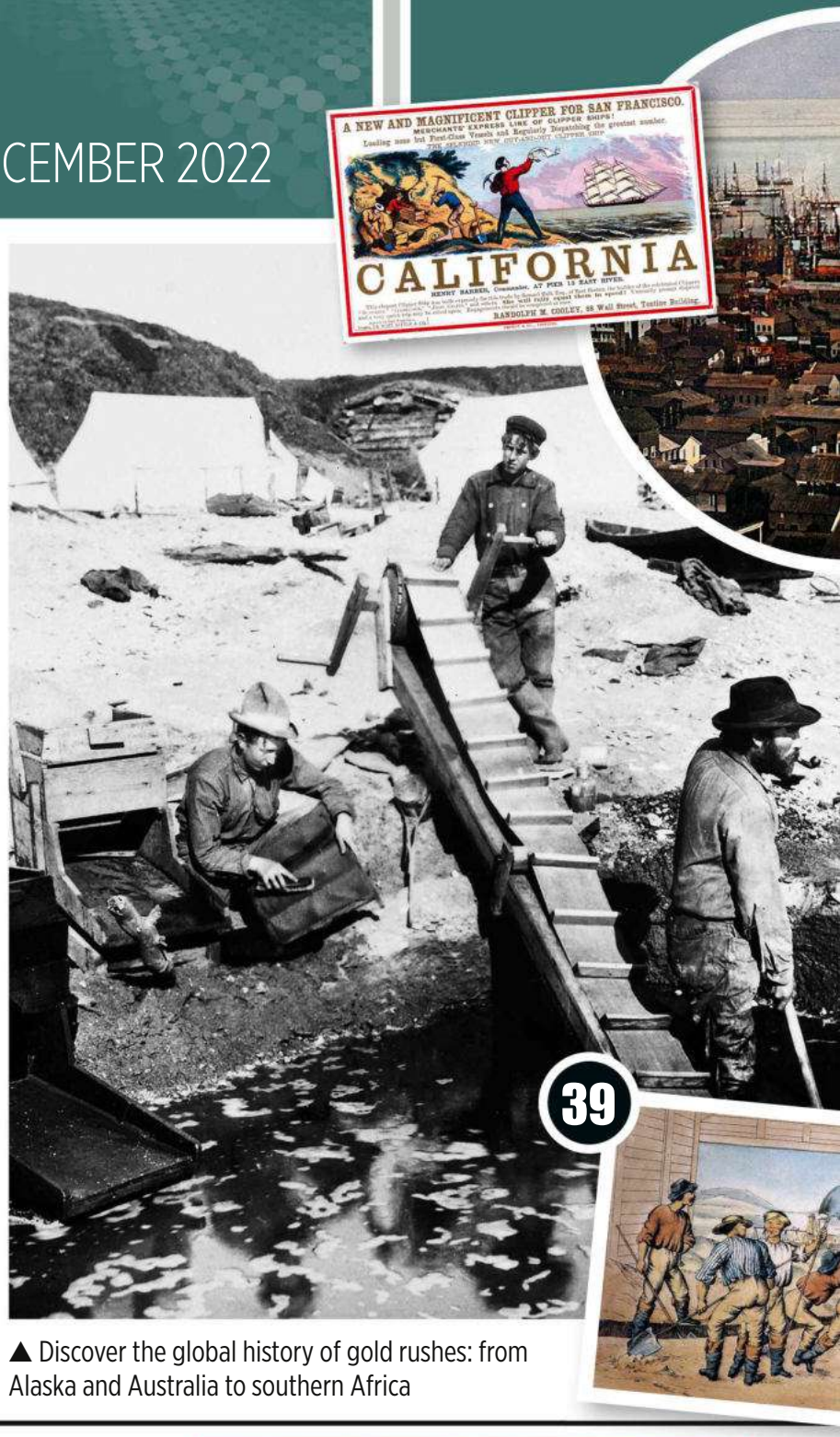

▲ Discover the global history of gold rushes: from Alaska and Australia to southern Africa

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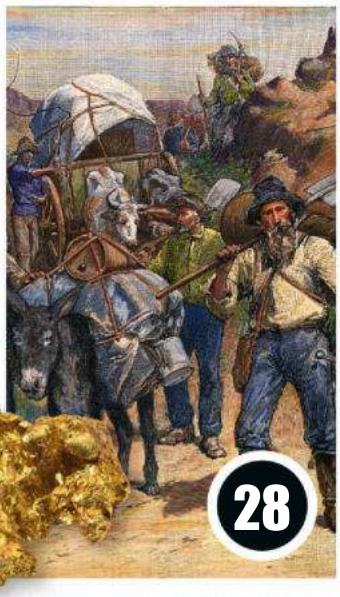

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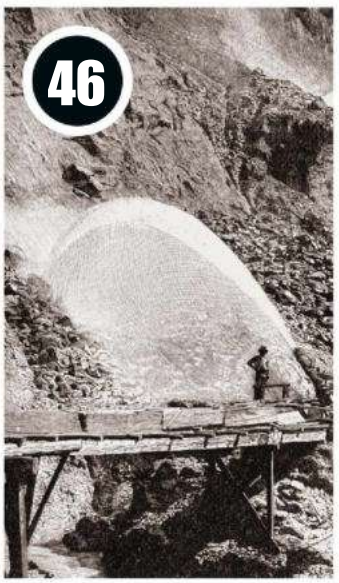

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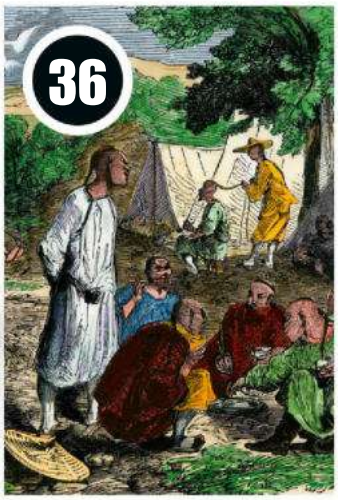

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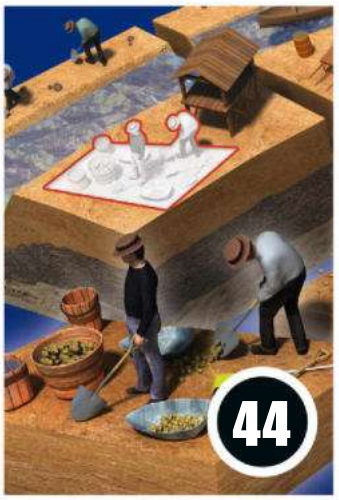

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SNAPSHOTS

1930
HOT OFF THE PRESS

Precipitated by the breakdown of so-called 'coffee with milk politics' – a term referring to the stranglehold on national politics wielded by São Paulo's coffee growers and Minas Gerais's dairy industry – the Revolution of 1930 augured the collapse of the First Brazilian Republic. Following a contested presidential election and military insurrection, Getúlio Vargas swept to power and deposed Washington Luís as president that November. Newspapers supportive of Luís were banned and many of their offices torched, as seen here where a crowd in Rio de Janeiro look on as firefighters tackle a blaze at *O Paiz*'s headquarters.

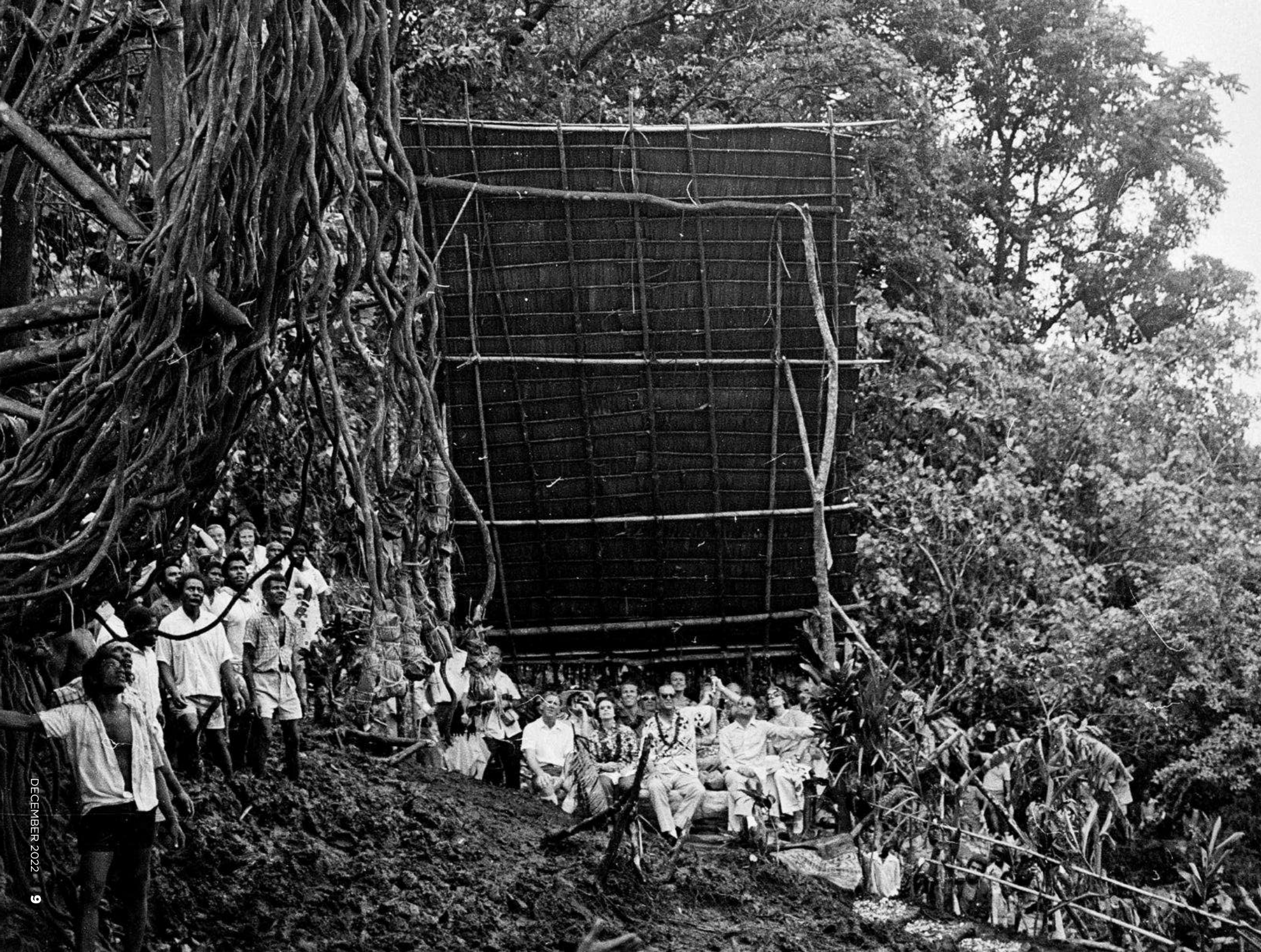
GETTY IMAGES

GETTY IMAGES

SNAPSHOTS

1974
LEAPS AND CROWNS

When it comes to rites of passage, few are more daring than land diving – a tradition from which the modern sport of bungee jumping is thought to originate. Between April and June each year, men in the southern part of Pentecost Island, Vanuatu, tie liana vines around their ankles and fling themselves off wooden towers up to 30 metres (98ft) high, to prove their virility and ensure a bountiful yam harvest. During a visit in February 1974, Queen Elizabeth II and Prince Philip (shown here seated at the base of the tower) observed the ritual. Tragically, it being the wrong season and the vines too dry, the royal couple witnessed several divers hit the ground, with one later dying in hospital.



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SNAPSHOTS

1959
STEERING THROUGH

Held annually, the 24 Hours of Le Mans sports car race has been going strong since 1923 and is the world's oldest endurance racing event. Competitors must cover the greatest distance in 24 hours to be crowned champions. About 150,000 spectators flocked to the 1959 event, drawn by the rivalry between Ferrari, Aston Martin and Porsche. The Anglo-American driving team of Roy Salvadori and Carroll Shelby triumphed in their Aston Martin DBR1, though not without great sacrifice. Sick with dysentery and living with a serious heart condition, Shelby completed the race with a nitroglycerin capsule concealed beneath his tongue (in case of a heart attack) and later collapsed.

THINGS WE LEARNED THIS MONTH

RECENT HISTORY HEADLINES THAT CAUGHT OUR EYE

IS NEFERTITI HIDING IN PLAIN SIGHT?

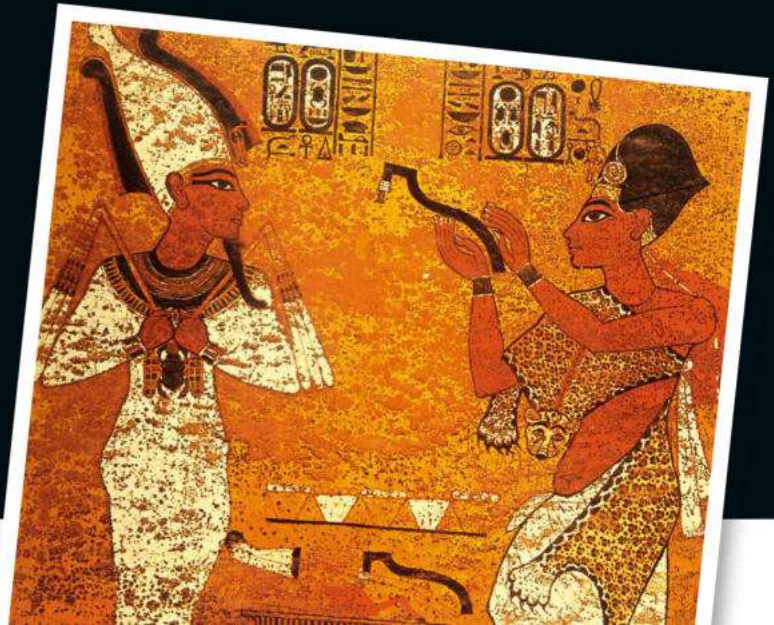
Hints of ancient whitewashing in Tutankhamun's tomb have bolstered the theory that the space was originally intended for his stepmother, Nefertiti.

Dr Nicholas Reeves, a former curator in the British Museum's Department of Egyptian Antiquities, believes he has found evidence of changes made to cartouches on the burial chamber's northern wall: the current cartouches that depict Tutankhamun being buried by his successor, Ay, may have been painted over cartouches of Tutankhamun burying his predecessor, Nefertiti. Reeves also believes that the facial features of Ay depicted on the wall match other images of the boy king, whereas the mummy's face evokes Nefertiti's famous profile.

The small size of Tutankhamun's tomb has puzzled experts since it was uncovered in 1922, but Reeves believes his discovery supports the idea that Nefertiti may lie in a hidden chamber adjacent to her stepson's burial chamber.

MAIN: **Queen Nefertiti's burial chamber could lie adjacent to Tutankhamun's, according to new research by Dr Nicholas Reeves**

BELOW: **This image of Ay performing the 'opening of the mouth' ceremony for Tutankhamun may have originally depicted the boy king himself performing the same rite on Nefertiti**



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CALLS FOR PUBLIC OWNERSHIP OF MEDIEVAL WELSH LANDMARK

Fears over the condition of a site where Wales's last native prince, Owain Glyndŵr, once resided, have prompted calls for it to be brought into public ownership. Located in Sycharth, the fortress was destroyed in 1403, leaving behind a large mound that visitors say has fallen into disrepair with no clear signage and overgrowth threatening to engulf the monument. Cadw, the Welsh government's historic environment service, is talking to the site's private landowner to plan how Sycharth can be preserved for the future.

IMAGES SHOW BEATLES ON BRINK OF STARDOM

Photographs of The Beatles performing at Liverpool's Cavern Club in July 1961, a year before the release of their debut single 'Love Me Do' have recently been discovered. The images show George Harrison, John Lennon, Paul McCartney and the band's original drummer, Pete Best, entertaining a crowd in the venue's intimate space. Recently returned from 500 hours of performances across 90 days in Hamburg, the foursome, aged between 18 and 20, appear gaunt and dressed in leather trousers and cotton tops. The snaps offer a unique glimpse of the band just three months before they adopted the famous 'Beatle haircut' and signed with Brian Epstein.

SCIENTIFIC FINDINGS SHED LIGHT ON EARLY ENGLAND'S DNA

DNA extracted from skeletons buried between AD 200 and AD 1300 in multiple sites across England has revealed evidence of mass migration from northern Europe. The findings, which come from one of the largest DNA projects ever conducted in Europe, dispel the hypothesis that a small Anglo-Saxon elite influenced life in post-Roman Britain. Rather, Anglo-Saxon culture was largely the result of ongoing waves of migration from places like southern Scandinavia, the northern Netherlands and Germany.

£9,000

The price paid, at auction, for a gilt brooch containing a lock of Lord Nelson's hair

Tintagel Castle in north Cornwall is one of six sites identified by English Heritage as being at risk from rising sea levels and extreme weather

HISTORIC COASTAL STRUCTURES 'AT RISK'

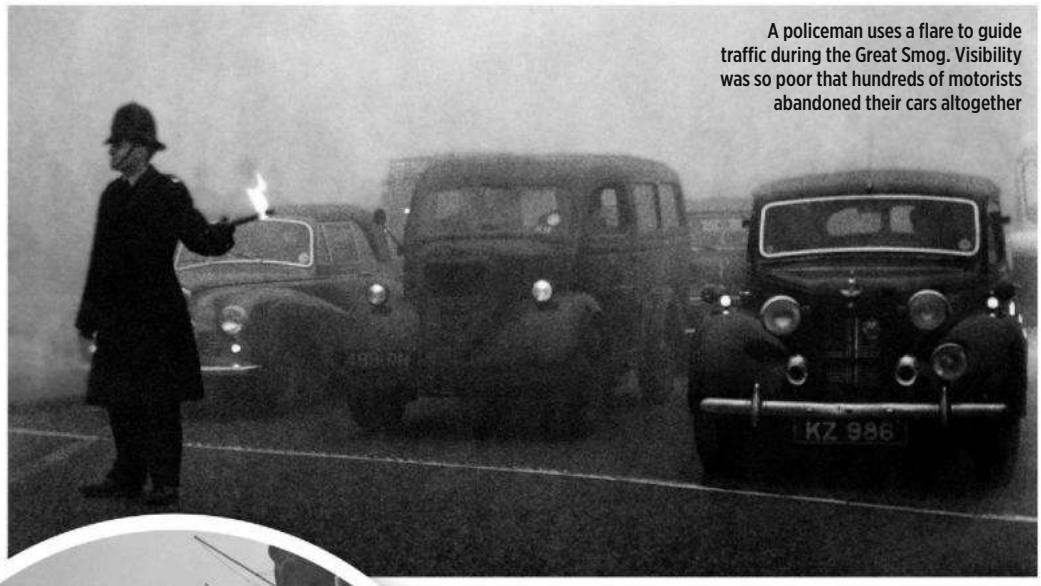
English Heritage has identified six historic defensive structures at risk of erosion by rising sea levels and extreme weather events. Chief among them is Tintagel Castle, long associated with Arthurian legend, whose location along northern Cornwall's rocky Atlantic coast has seen the sea begin to eat away at a viewing area and coastal path. The partial collapse in February 2021 of Hurst Castle, a 16th-century artillery fort on the Hurst Spit in Hampshire, before stabilisation work was due to begin, has already highlighted the time-critical nature of protecting England's coastal defences.

The Great Smog

Words: Rhiannon Davies

On 5 December 1952, as Londoners rushed around the city after the start of the festive season, fingers of fog began to unfurl between chimneys. But as night rolled in, the fog thickened, and soon a blanket of smog was choking the capital. Londoners stumbled around the streets, unable to see further than a few metres in front of them.

When the Sun rose the next day, it failed to blaze away the smog – instead, it grew thicker and thicker, until in some areas people could no longer even make out their feet. For the next four days, it continued to choke the city. Londoners breathing in the fumes started to hack and gag, and cases of pneumonia and bronchitis soared. Hospitals began to fill up, as thousands succumbed to the noxious air.



A policeman uses a flare to guide traffic during the Great Smog. Visibility was so poor that hundreds of motorists abandoned their cars altogether

ABOVE: **Periodic outbreaks of smog would continue for several years – this image shows a London street in late 1953**

RIGHT: **Tower Bridge is seen shrouded in smog during the 1952 crisis**

FATAL COMBINATION

Fog was nothing new in London, though it had never been seen at such extremes before. Even as far back as the 13th century, fogs caused by burning coal were covering the city. However, the Industrial Revolution kicked things up a gear. Newly built factories pumped thousands of tonnes of acrid gases and particulate out of their chimneys, polluting the air and making smogs – a heavily polluted fog – more likely to occur. Nicknamed "peasoupers", these yellow fogs could cause carnage when they descended upon the city. In 1873 for instance, a December fog saw the city's death rate rocket by 40 per cent.

There had been some paltry efforts to clean up the city's air, but in 1952 coal fires still burned across London – and as that year's winter was unseasonably cold, even more coal was tossed into people's fireplaces. To make matters worse, on 5 December an anticyclone spun above London, trapping the smoke that was pouring out of the city's chimneys and preventing it from dissipating in the atmosphere. This pressure cooker boiled over to create the most polluted smog in London's history.

During the five days that it blanketed the city, normal life came screeching to a halt. The city's transportation system largely fell apart; cars littered the roads, having been abandoned by their owners. Crime rates soared, with miscreants taking advantage of the chaos.

Meanwhile, pollutants continued to pour into the atmosphere. Each day during the Great Smog, 1,000 tonnes of smoke particles, 2,000 tonnes of carbon dioxide, 140 tonnes of hydrochloric acid, 14 tonnes of fluorine compounds and 370 tonnes of sulphur dioxide were pumped into the sky. Unsurprisingly, breathing in this mix was

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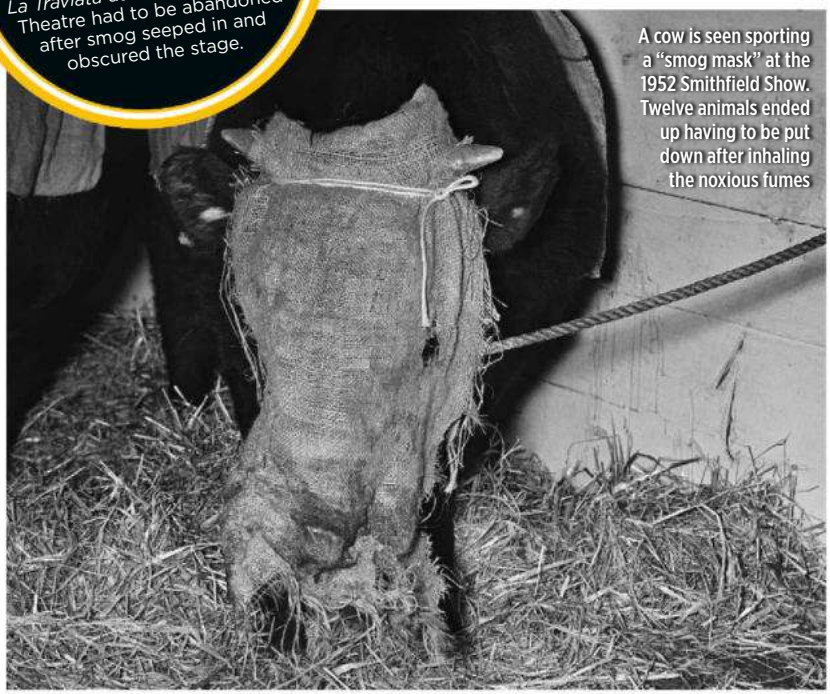
DID YOU KNOW?

CLASSICAL GAS

Even indoors, there was no escaping the smog engulfing the city. On the evening of Monday 8 December, a performance of *La Traviata* at the Sadler's Wells Theatre had to be abandoned after smog seeped in and obscured the stage.



A cow is seen sporting a "smog mask" at the 1952 Smithfield Show. Twelve animals ended up having to be put down after inhaling the noxious fumes

"The city's transportation system largely fell apart; cars littered the roads, having been abandoned by their owners"

very dangerous – and for at least 4,000 people, it soon proved fatal. A 33-year-old woman from St Pancras who previously suffered from chest pains lost her life on 9 December, with a report stating: "The fog would appear to have accelerated death, as the sudden deterioration in [her] condition was apparently unexpected by the doctor in attendance."

CLEANING UP THEIR ACT

Animals were also adversely affected. The media reported that more than 100 cattle at the Smithfield Show (an agricultural fair at Earl's Court) had to be seen by a vet as a result of breathing in the fumes, with 12 being subsequently put down. A man named LF Beccle wrote to the Ministry of Health: "I would have shared the fate of the Aberdeen Angus cattle at the Smithfield Show, for whom I had great sympathy and fellow feeling. I could not move for four days without the greatest distress... I must have been very bad indeed one night, for my wife actually held my hand and said she was sorry for me! That is proof enough that I looked as if I was going to kick the bucket."

His letter continued: "What are our wonderful scientists doing? In an age of jet propulsion, atomic energy, and all the miracles of modern science at which we marvel, these wretched people can't solve the problem of a lousy fog!" This sentiment was echoed across the nation, and the government was forced to act.

In July 1956, less than four years after the Great Smog settled on London, the first Clean Air Act gained royal assent. This set out that regions of London would be smoke-free, and clamped down on coal fires both at home and in factories. The act is remembered as a key milestone in the history of environmentalism, and the city has never suffered such a terrible smog since.

BBC

EVERY MONTH THROUGHOUT 2022, WE'LL BE COMMEMORATING THE BBC'S 100TH BIRTHDAY WITH A TRIP DOWN MEMORY LANE...

11 December 1936

EDWARD VIII'S ABDICATION SPEECH IS BROADCAST TO THE NATION

Families huddle around their radio sets in disbelief as Edward announces he has stepped down as king, and has been replaced by his brother, George VI. During his speech he explains his reason for abdicating is his desire to marry the divorcee Wallis Simpson. BBC engineers record the broadcast, despite being told not to, and it is today seen as one of the 20th century's most significant transmissions.

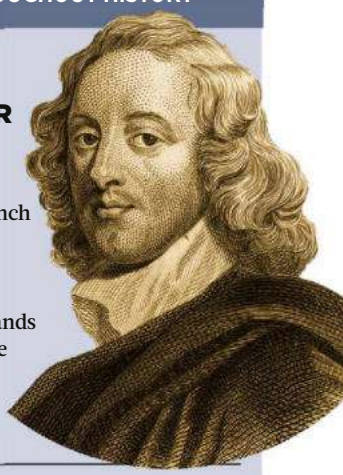
OTHER ANNIVERSARIES

A LOOK BACK AT OTHER EVENTS THAT HAVE TAKEN PLACE IN DECEMBER THROUGHOUT HISTORY

11 December 1640

PROTESTERS CLAMOUR FOR CHURCH REFORM

A crowd descends on the Long Parliament with the Root and Branch Petition, which bears 15,000 signatures from angry Londoners. Supported by politicians such as Sir Henry Vane (*pictured*), it demands for bishops to be expelled from the clergy's ranks, and for the Church to undergo sweeping changes.



16 December 1707

MOUNT FUJI SPEWS ASH INTO THE ATMOSPHERE

The volcanoes that make up Fuji shoot tonnes of volcanic rock and ash into the sky, covering the city of Edo and blanketing crops, leading to mass starvation. This is the last recorded eruption at Fuji, though it is still classed as active.

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THE HISTORY DETECTIVE

DR NELL DARBY INVESTIGATES COLD CASES FROM THE ARCHIVES

CASE #003

MURDER IN THE YEAR OF THE RIPPER

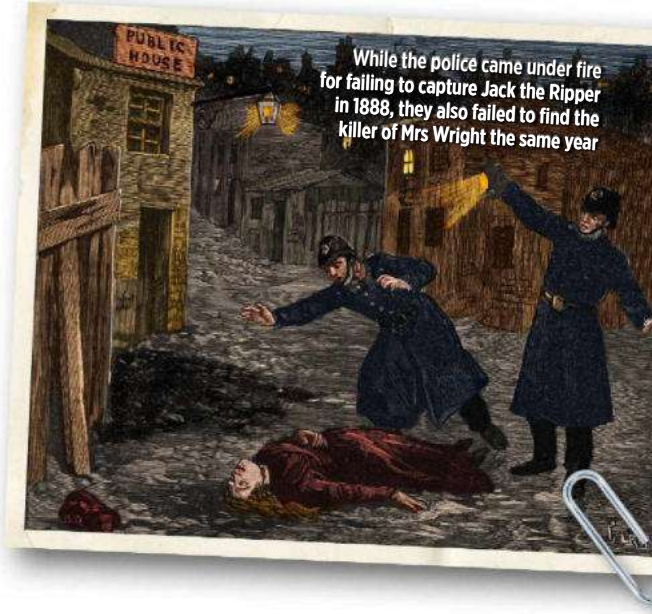
DR NELL DARBY DELVES INTO THE STORY OF A LONDON KILLING THAT BECAME OVERSHADOWED BY DISTURBING DISCOVERIES IN THE CITY'S EAST END

The year 1888 is largely remembered in the annals of London history for the murders of five women in the Whitechapel area by a man who has become known as Jack the Ripper. Yet in the same year, in London, there were several other unsolved murders of women. One such woman was Frances Maria Wright.

In the early afternoon of 16 May 1888, Mrs Wright, 71, who lived at 19 Canonbury Terrace in Islington, was found dead on her inside door mat. A nervous woman who disliked being left alone in her house, she had inexplicably let two men dressed in outfits that suggested they were gas-fitters or plumbers, and armed with workbags, into her home. She was found minutes later, dead from a combination of shock and an injury, having been hit over the eye. A man was charged with her murder, but quickly acquitted when it was found he had a strong alibi.

Frances was an Irish immigrant to London. Born in Cork, her father died when she was young, and until her marriage in 1843, to merchant's clerk Charles Cole Wright, she made a living as a fringe-maker. By 1861, the couple had moved to Canonbury Terrace, where they would live for the rest of Frances' life.

At around 2.30pm on 16 May 1888, the two 'workmen' were seen calling at Frances' door, and being let in, but shortly afterwards, they were seen coming out from the garden, being witnessed by a neighbour, Berthe Prevotal. Berthe's housemate, Selina Chefderville, chased after one of the men as they ran off in different directions. She was joined by a group of boys, all shouting "Stop, thief!". Eventually they lost sight of him, but Selina managed to find a policeman, who followed her back to Canonbury Terrace. There, the body of Mrs Wright was found.



While the police came under fire for failing to capture Jack the Ripper in 1888, they also failed to find the killer of Mrs Wright the same year

ROBBERY GONE WRONG?

Henry Glennie, the 24-year-old who would stand trial that October at the Old Bailey, had apparently told an acquaintance, Mary Dominy, that he had killed Frances in a botched robbery. He was also a hot water fitter, so his clothes would have matched those of the men seen at the Wright house, and he was from the local area. Yet the witnesses could not recognise him, and he was proved in court to have been in Neasden at the time of the incident. The police duly came under criticism for focusing on the wrong man and keeping him at the station for too long without charge.

Other mysteries remained. Frances' husband said that there had been nothing wrong with his property's gas or water fittings, so there was no need for any workmen to have visited the house. Frances had a substantial amount of money on her, unknown to her husband, and this was not stolen – nor was anything else. There was suspicion that Mary Dominy – who had also been the Wrights' former charwoman – could have been involved, as she was implicated in a few robberies, and her partner was in prison for the same. She was examined during Henry Glennie's trial, but she was never charged in connection with the murder. Then, within a few months, Mrs Wright's murder would be eclipsed by unfolding events in Whitechapel, and forgotten.

Within a few months of his wife's murder, Charles Wright remarried, only to die himself in 1890. Henry Glennie continued to live in Islington, and work as a hot water fitter, while Mary Dominy was sent to a Salvation Army home as a 'rescued woman'.

Frances Wright was an elderly and rather timid woman – why would anyone have wanted to kill her?

DR NELL DARBY is a crime historian and writer, and the presenter of the CBS Reality series *Murder by the Sea*. Her latest book is *Sister Sleuths: Female Detectives in Britain* (Pen & Sword History, 2021)

LISTEN

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GETTY IMAGES X1, ALAMY X1

The Hussite Wars

Words: Nige Tassell

WHAT WERE THE HUSSITE WARS?
Sometimes known as the Hussite Revolution or the Bohemian Wars, the Hussite Wars lasted roughly 15 years, between 1419 and 1434. They were fought between a coalition of Catholic forces – backed by the pope, the Bohemian king (and later Holy Roman Emperor) Sigismund and numerous Catholic-friendly European states – and a group known as the Hussites, who represented a precursor to the Martin Luther-led Protestant Reformation a century later.

The Hussites were devoted followers of Jan Hus, a theologian and religious reformer from Bohemia (a kingdom that broadly covered what is now the Czech Republic), whose memory they set out to protect and whose teachings they sought to promote.

WHAT DID JAN HUS BELIEVE IN?
A preacher at the Bethlehem Chapel in Prague, where he delivered sermons in Czech rather than Latin, Hus was outspoken about the indulgences of the Catholic Church, which at that time was experiencing the Western Schism, a split within the Church where rival bishops claimed to be the true pope. Hus spoke out against Pope Alexander V and his successor, the antipope John XXIII, and was eventually excommunicated.

A Council of Constance was convened in 1414 to settle the Western Schism once and for all. Hus was called before the council to repudiate his past pronouncements, which he refused to do: "I would not for a chapel of gold retreat from the truth!" Despite being assured of his immunity from prosecution by the council, Hus was imprisoned for heresy and eventually burned at the stake in 1415.

HOW DID THE HUSSITES FORM?
Once news of Jan Hus's killing emerged, there was much disquiet across Bohemia, with many cases of civil disturbance breaking out. Hus's followers were no minority group. A great many enraged Bohemian noblemen united to voice their protest to his death, offering protection to anyone being persecuted for their religious beliefs. Hussites were also found in the corridors of governmental power,

BELOW RIGHT: **An 1836 painting shows a Hussite preacher holding a chalice – a symbol representing Jan Hus's demands that wine should be given at communion**

BELOW LEFT: **The 1431 battle of Domažlice was a decisive victory for the Hussites**

ALAMY X3, GETTY IMAGES X2

Jan Hus was outspoken about the indulgences of the Catholic Church, and would eventually pay for his religious beliefs with his life

A painting imagines the chaos atop Vítkov Hill near Prague, where Hussite commander Jan Žižka defeated a Catholic army led by King Sigismund in 1420

while King Wenceslas IV also expressed his anger towards the perpetrators.

HOW DID THE HUSSITE MOVEMENT GROW?

At first, this coalition of noblemen did little more than use words against those who'd authorised the killing of Hus. Some then ordered the removal of Catholic priests from their parishes for failing to give communion using both bread and wine, a key tenet of Hus's teachings.

Hussitism began to spread strongly across this region of central Europe, which drew the ire of the Catholic Church and raised the spectre of a civil war. To avoid this, Wenceslas was persuaded by his half-brother Sigismund of the need to stop protecting Hussites, whom he regarded as heretics. As a result, those previously banished Catholic priests were reappointed while prominent Hussites were exiled. The outcry over this accelerated Wenceslas's demise and he died of a stroke in 1419. Sigismund was now king of Bohemia.

HOW DID THE HUSSITE WARS BREAK OUT?

The Hussites weren't a single unified group. They contained many factions with differing aims and doctrines. For instance, the Utraquists represented the more moderate wing and favoured reform within the Church's existing hierarchy, while the more radical factions, such as the Taborites, sought to abolish the hierarchy, its rituals and its earthly possessions. They stood for stripping back the practice of worship to include only that referred to in the Bible.

Nonetheless, despite their differences, the Hussites enjoyed early success once war broke out. In 1420, Sigismund acted on a papal bull from Martin V permitting a crusade against whom he saw as heretics. Backed by a multitude of German princes and boasting significant military numbers, he laid siege to Prague, causing the Hussites to set forth their demands in a document known as the Four Articles of Prague. These articles were essentially a distillation of their core beliefs, but were rejected by Sigismund and the conflict continued, resulting in his defeat at the battle of Vítkov Hill in the summer of 1420 by Jan Žižka, the head of the Hussite army.

> "Despite being assured of his immunity from prosecution, Hus was imprisoned for heresy and burned at the stake"

The battle of Lipany, fought in 1434, marked the final defeat of the Taborites and led to a compromise between the more moderate Hussites and Rome

HOW SUCCESSFUL WERE SUBSEQUENT CRUSADES?

Little more than 12 months later, a second crusade was launched, but Sigismund's occupation of the town of Kutná Hora was short-lived and his men were again defeated in battle by Jan Žižka. By 1427, two more crusades had been declared. The crusaders were unsuccessful in both of these too.

HOW WERE THE WARS RESOLVED?

Such was the defensive strength of the Hussites that the crusade-supporting German princes desired a peaceful settlement, as did the moderate Utraquists. But, still eager to completely eradicate the Hussite influence, the Church authorised one last crusade before entering into negotiations. Again, the crusaders were vanquished.

Throughout the wars, there had been internal division within the Hussite ranks, and in 1434 hostilities broke out between the Utraquists and the Taborites, with the latter defeated at the battle of Lipany (where they also faced opposition from loyalist Catholics). A compromise agreement was then reached between the moderate Hussites and Rome – demands known as 'the compacts'. As a result, the Utraquists represented the dominant church in Bohemia for the best part of the next two centuries until, in 1620, any and all religious activity that wasn't Catholic in nature was outlawed.

LISTEN

BBC RADIO 4 Melvyn Bragg and guests discuss the history of Bohemia, including the impact of the Hussite Wars, in an archive episode of *In Our Time*: *bbc.co.uk/programmes/p00548cz*

Howard Hughes: the troubled tycoon

Every venture the American business magnate undertook was big – from his blockbuster movies to the planes he constructed. But how did Hughes go from rubbing shoulders with the stars to living a life of seclusion?

With the death of his father in 1924 and just two years after his mother's passing, Howard Robard Hughes Jr took over a million-dollar business at barely 18 years old. He was studying engineering and not overly enthused to run a company manufacturing drill bits for the oil industry. But he was keen to make the most of his fortune and freedom. Buying out his relatives' shares and putting savvy businessman Noah Dietrich in charge of day-to-day dealings, the young Hughes set off to pursue his passions: movies and planes.

In 1925, he moved with his new wife Ella Botts Rice from his home state of Texas to be a filmmaker in Hollywood. Since money was no object, he immediately delivered a string of hits as a producer, including the Oscar-winning comedy *Two Arabian Knights*, before starting work on *Hell's Angels*, a World War I epic featuring a huge fleet of aircraft in stunning dogfighting sequences.

AN AERIAL OBSESSION

It would be his magnum opus, albeit a troubled one. A compulsive need for perfection over every miniscule detail cost him over $3m and three years on production, while the dangerous aerial stunts cost several lives. When finally released in 1930, the movie had been re-shot from a silent to a talking picture; the leading lady replaced; and two directors had given up, with Hughes himself taking the reins. Still, it was a blockbuster smash.

From a shy loner as a child struggling with partial deafness, Hughes became the talk of Hollywood, famed as an opulent spender – not content with one suit or car, he would buy dozens at once – and a playboy. Ella had grown weary of being ignored and filed for divorce by now. Among the myriad movie stars that he dated were Joan Crawford, Ava Gardner, Katharine Hepburn and Ginger Rogers, and he proposed to Joan Fontaine. His later movies made headline-grabbing news too, such as

Hughes poses alongside his H-1 Racer, in which he broke the world landplane speed record in September 1935

when *Scarface* (1932) and *The Outlaw* (1943) ran afoul of the censors for violence and women's revealing outfits respectively.

Simultaneously, Hughes was making his name as an aviator. Despite crashing on the set of *Hell's Angels* performing a manoeuvre deemed, rightly, too risky by the stuntmen, he had a deep love of the thrill and solitude of being airborne. In 1932, he founded the Hughes Aircraft Company and set about creating and meticulously refining planes. Soon, he was breaking speed records in his H-1 Racer and, in 1938, circling the world in a new quickest time of 91 hours and 14 minutes.

Priorities changed during World War II as Hughes turned his full attention to his lucrative military contracts, but that was when his impossibly high and eccentric standards became a problem. None of the projects, including the XF-11 reconnaissance plane and H-4 Hercules, were finished by the time war was over. He also badly crashed during a couple of test flights, one resulting in broken bones, a collapsed lung and burns. To cover a scar on his lip, he started growing a moustache.

Hughes kept working, fixatedly needing to complete the Hercules: a giant flying boat with eight engines and a 98-metre wingspan capable of carrying more than 750 troops or tonnes of equipment. Nicknamed the *Spruce Goose* as it was made of wood, it took so long that Hughes ended up being called before a Senate committee over misusing government funds. The surest way to silence his detractors was to fly it, which he did – only once, and covering just a mile – on 2 November 1947.

CRASHING DOWN TO EARTH

The high-flying, fabulously wealthy business tycoon is half the Howard Hughes story. The other half relates to his mental state: his severe germaphobia and OCD (obsessive compulsive disorder). His behaviours had long been dismissed as eccentricities, such as washing his hands until they bled and burning his clothes if he had been near someone ill. Once, he locked himself in a darkened room for four months, sitting naked on a chair watching movies and keeping his urine in jars.

But they worsened until, in 1950, he went into complete seclusion. There he stayed for his last 26 years. His businesses kept operating – he even established a new one, the Howard Hughes Medical Institute – and he kept getting richer. He could still spot an opportunity too: when asked to leave the penthouse he was holed up in at the Desert Inn in Las Vegas, he responded by buying the hotel, followed by huge swathes of land around the city that he developed.

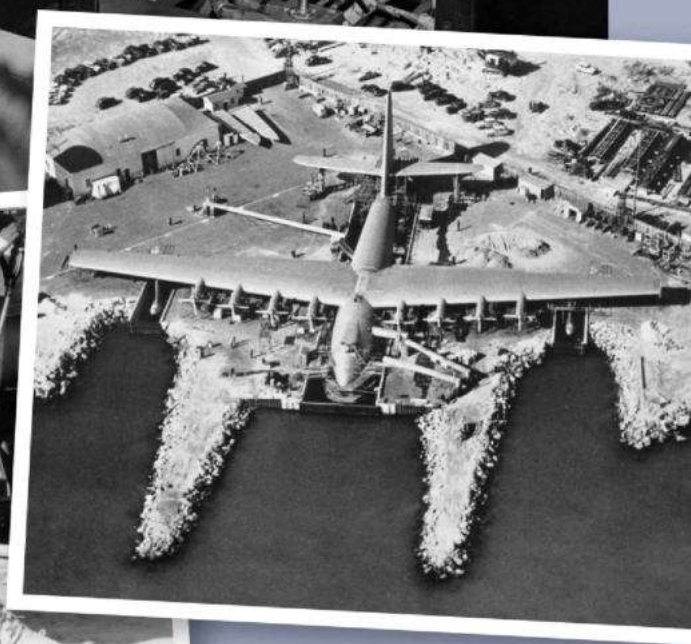
By the end, however, he cut a drastically different figure: emaciated, addicted to the painkillers he took for the injuries from his crashes, going days without sleep and rarely bathing, and sporting a wiry beard, curling fingernails and tissue boxes on his feet. Hughes died of kidney failure on 5 April 1976, aged 70, while travelling on board a plane to receive medical treatment in Texas. Without a valid will (inevitably, several forgeries and fakes were put forward), it took years to resolve his billion-dollar fortune.

WORDS: JONNY WILKES

ALAMY X2, GETTY IMAGES X3

Howard Hughes pictured at the controls of his ambitious flying boat, the H-4 Hercules (or *Spruce Goose*), in 1947. It only ever made one flight

"By the end, he cut a drastically different figure: emaciated, addicted to painkillers, going days without sleep, and rarely bathing"



ABOVE: **Hughes' first wife, Ella Botts Rice, divorced the business magnate in 1929 after becoming increasingly tired of his playboy lifestyle**

RIGHT: **The entrepreneur pictured on the set of his 1932 film *Sky Devils*, a comedy set during World War I**

FAR RIGHT: **The *Spruce Goose* seen shortly after completion in California**

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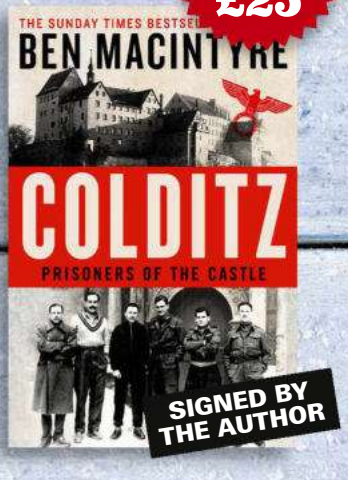

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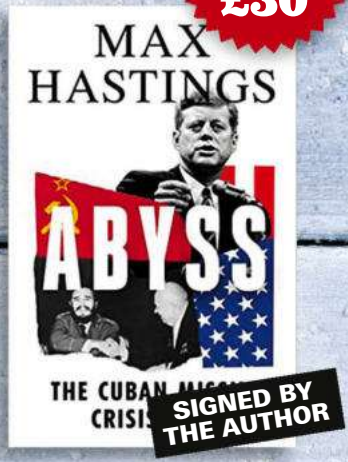

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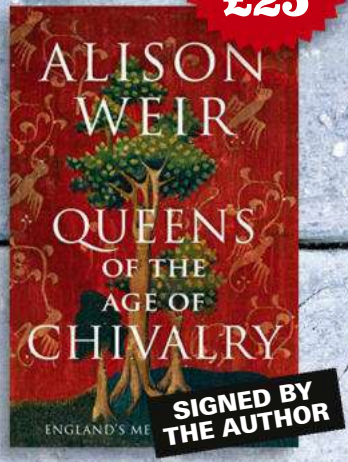

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6 THINGS YOU (PROBABLY) DIDN'T KNOW ABOUT THE CROWN JEWELS

With a coronation on the horizon, we reveal some lesser-known facts about the nation's most precious treasures

1 THE OLDEST ITEM AMONG THE CROWN JEWELS IS THE CORONATION SPOON

Even in 1349, the Coronation Spoon was thought to be of "ancient forme". Probably made either for the first Plantagenet monarch, Henry II (r1154–89), or his successor, Richard the Lionheart (r1189–99), the silver gilt spoon measures 26.7cm in length, likely just a little longer than the spoon you use to serve spuds on a Sunday afternoon.

Viewed alongside some of the spectacular items that make up the Crown Jewels, it might easily be overlooked. However, it is of huge ceremonial importance. The bowl of the spoon is divided in half by a ridge. During the coronation, the archbishop of Canterbury dips two fingers into either side of the bowl before anointing the new monarch as supreme governor of the Church of England.

Further back, the spoon may once have been used for mixing wine and water, but its first recorded ceremonial use in a coronation came in 1603, after James VI of Scotland came south to take the throne of England and Ireland as James I (r1603–25).

On succeeding James, Charles I (r1625–49) proved unequal to holding the throne and England descended into civil war. When the English Commonwealth was created in 1649, the decision was taken to flog off or melt down the medieval and Tudor items that made up the original Crown Jewels. The spoon fetched 16 shillings when it was bought by a member of the royal household, Clement Kynnersley.

And so the spoon might have passed into private hands forever, except that after the Interregnum, Kynnersley presented the spoon to Charles II (r1660–85). With the Restoration, Kynnersley became the new monarch's first yeoman of the Removing Wardrobe, a job that involved looking after the royal furnishings that travelled from palace to palace.

The spoon, which at this point had four pearls added to its handle, recommenced its journey down the years as an object of near-mystical significance.

The Coronation Spoon is first thought to have been used for ceremonial purposes when King James VI of Scotland was crowned king of England and Ireland in 1603

The spoon was sold to a member of the royal household for just 16 shillings, before being presented to Charles II after the Restoration in 1660

GETTY IMAGES X6, ALAMY X3

2 ONE OF THE GEMSTONES ADORNED A SAINT'S FINGER

RIGHT: **St Edward's Sapphire is said to have been set in a ring worn by Edward the Confessor**

BELOW: **It now sits atop the Imperial State Crown – a symbol of the monarch's sovereignty**

Edward the Confessor (r1042–66) is, tangentially, a key figure in the history of the Crown Jewels. Reigning for more than two decades, he was the last English monarch of the House of Wessex, and disputes over who should succeed him culminated in William the Conqueror (r1066–87) invading England.

In the same year that Edward's brother-in-law, Harold II (r1066), took the fateful gamble of marching his army south to face William at the battle of Hastings, the late king was laid to rest at Westminster Abbey. His coronation ring was buried with him, and the gemstone that would later come to be known as St Edward's Sapphire is thought to have been set within it.

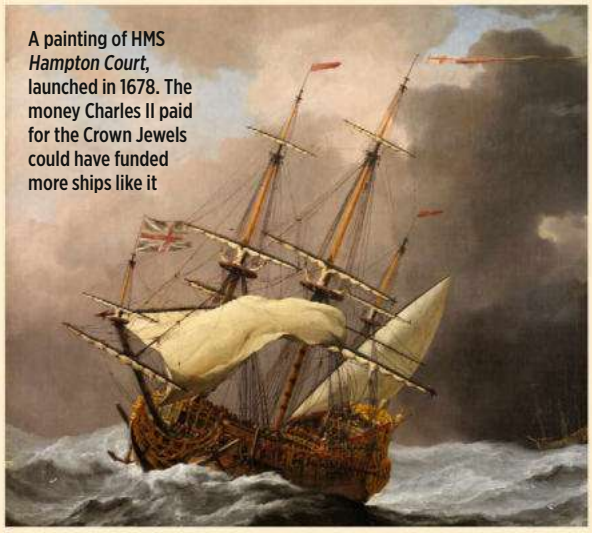
Which rather begs the question, how did Queen Victoria (r1837–1901) come to request that this octagonal, rose-cut sapphire be added to the Imperial State Crown? This is a crown that has existed in various iterations since the Restoration and signifies the sovereignty of the monarch.

The answer dates back to 1163, two years after Pope Alexander III canonised Edward – a move that likely had more to do with politics and Henry II helping Alexander get the papal gig than with Edward being especially virtuous. On 13 October 1163, Edward's body was moved to a shrine in Westminster Abbey.

His ring was taken from his finger and deposited with other relics held at the abbey. From here, the exact story of the sapphire's journey down the years becomes rather vague, not helped by the abbey's relics disappearing in the wake of the dissolution of the monasteries (1536–41). It's furthermore unclear what happened to the gem in the Interregnum, but it seems likely to have been cut into its present form for the coronation of Charles II.

But whatever happened to St Edward's Sapphire, its presence in the top cross of the Imperial State Crown represents a hugely symbolic link to the past.

Charles II chose to recreate the Crown Jewels at great public and personal expense



A painting of HMS *Hampton Court*, launched in 1678. The money Charles II paid for the Crown Jewels could have funded more ships like it

3 RECREATING THE CROWN JEWELS COST AS MUCH AS THREE WARSHIPS

The breaking up of the Crown Jewels under Oliver Cromwell, who served as lord protector between 1653 and 1658, left Charles II with a problem. How could he have a coronation without a crown and the other necessary regalia to convey the grandeur of his role?

The answer was to recreate the Crown Jewels based on records of the lost items. The cost was eye-watering. Banker and royal goldsmith Robert Vyner supplied many of the items, including St Edward's Crown, for the sum of £12,184 7s 6d. To put that into context, this could have bought the country three warships – potentially useful during a reign when the English and Dutch competed for naval superiority.

Rounding out the collection were the Coronation Spoon and three swords of state that had been returned to the Crown, plus jewels that had been pawned in Holland. Charles himself splashed out more than £10,000 on altar and banqueting plate.

In short, many of the most familiar items in the Crown Jewels trade on the past rather than reach as deeply back into the lineage of the British monarchy as you might imagine. Then again, perhaps that's appropriate, because conventions around the use of different items sometimes turn out to have surprisingly recent roots.

Take St Edward's Crown. It is, as its name suggests, based on Edward the Confessor's medieval crown and is now thought of as the traditional headpiece for coronation days. But many monarchs down the years, including Queen Victoria, chose to don lighter crowns while St Edward's Crown sat symbolically on the high altar. It was George V (r1910–36) who, in 1911, revived the idea of wearing it for the occasion.

Queen Victoria chose not to wear St Edward's Crown, opting for lighter headgear instead

4 ONE STONE WAS CUT FROM THE WORLD'S LARGEST GEM-QUALITY ROUGH DIAMOND

The Cullinan Diamond caused a sensation when it was found in southern Africa in 1905. Yet it wasn't sold until 1907, when the Transvaal government bought the diamond and presented it to Edward VII (r1901–10).

According to one account, splitting the diamond – a task that fell to Dutchman Joseph Asscher – induced buttock-clenching levels of fear. It's said that Asscher, who had taken the precaution of having a doctor to hand, fainted after first striking the diamond. Others think this story fanciful.

Whatever the truth, the 3,106.75-carat diamond produced nine major stones. The two largest, the Great Star of Africa and the Second Star of Africa, are part of the Crown Jewels. The Great Star sits in the head of the Sovereign's Sceptre with Cross, a staff that represents the monarch's status as head of state.

RIGHT: **The Great Star of Africa sits in the Sovereign's Sceptre with Cross**

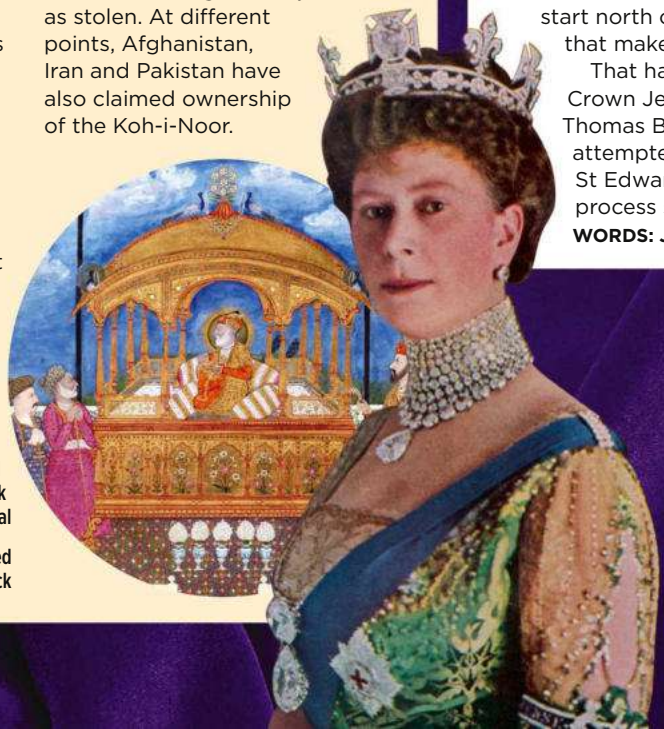
FAR RIGHT: **The task of splitting the Cullinan Diamond fell to Joseph Asscher**

5 THE OWNERSHIP OF THE KOH-I-NOOR IS STILL DISPUTED

Currently set in the Crown of the Queen Mother, the 105.6-carat Koh-i-Noor diamond has a rich history. According to legend, it was mined in India during the Kakatiya dynasty era (1163–1323). In the 17th century it was set in the Peacock Throne, occupied by the emperors of the Mughal empire.

It came into the possession of Queen Victoria with the British annexation of the Punjab and was publicly displayed at the 1851 Great Exhibition. Flawed and asymmetrical, it failed to impress viewers and Prince Albert ordered the stone to be recut. Subsequently, regarded as unlucky to male blue-bloods, it has been associated with female royals.

As with so many valuable items from the colonial era, its ownership is disputed. The British claim it was acquired legally under the 1849 Last Treaty of Lahore, but India continues to regard the jewel as stolen. At different points, Afghanistan, Iran and Pakistan have also claimed ownership of the Koh-i-Noor.



RIGHT: **The Mughal emperor Shah Alam II shown seated in a recreation of the Peacock Throne; the Koh-i-Noor adorned the original**

FAR RIGHT: **The diamond was also briefly added to the consort crown worn by Queen Mary of Teck**

ABOVE: **The Jewel House, the vault housing the Crown Jewels, is located in the Waterloo Block at the Tower of London**

RIGHT: **Drawings by Leonardo da Vinci also form a crucial part of the Royal Collection**

6 KING CHARLES III CAN'T JUST SELL OFF THE CROWN JEWELS

Kept at the Tower of London, the Crown Jewels are one of the most important parts of the Royal Collection. This is the world's largest private art collection, which includes, to name just a few highlights, around 550 drawings by Renaissance genius Leonardo da Vinci, a vast array of fine French furniture, and three Fabergé Imperial Easter Eggs.

But King Charles III can't cash in the Crown Jewels. That's because, while there's technically some legal wriggle room, the Royal Collection is passed from one monarch to the next in perpetuity. Effectively, the King is the fifth member of the House of Windsor to hold the Crown Jewels in trust for his successors and also for the nation.

As for the value of the Crown Jewels, estimates start north of £1bn, but in reality the 142 items that make up the collection are priceless.

That hasn't stopped people coveting the Crown Jewels, of course, notably Colonel Thomas Blood (1618–80), who in 1671 attempted to steal them, flattening St Edward's Crown with a mallet in the process so he could hide it.

WORDS: JONATHAN WRIGHT

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BBC ONE Clive Myrie explores the fascinating history behind the Crown Jewels in a BBC One documentary available to stream on BBC iPlayer: *bbc.in/3fVM7DJ*

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Dr Stephen Tuffnell discusses gold rushes across the globe on a recent episode of the *HistoryExtra* podcast: historyextra.com/gold-rushes-qa

28 Everything you wanted to know about the history of gold rushes
Dr Stephen Tuffnell answers key questions about the 19th-century gold fever that spread across the globe

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HISTORICAL CONSULTANT FOR THIS MONTH'S ESSENTIAL GUIDE

DR STEPHEN TUFFNELL
is associate professor of modern US history at St Peter's College, University of Oxford. He is the author of *Made in Britain: Nation and Emigration in Nineteenth-Century America*, published in 2020 by University of California Press.

ALAMY X5, GETTY IMAGES X3

EVERYTHING YOU WANTED TO KNOW ABOUT THE GOLD RUSH

Dr Stephen Tuffnell answers key questions about the gold fever that spread across the globe during the second half of the 19th century

Q: What makes a gold rush different to other periods of ongoing gold mining activity?

A: The allure of gold has driven people to mine, refine and smelt it to create artefacts, jewellery and exchangeable objects for centuries. But what makes a gold rush different to other, more general periods of gold mining is really to do with the scale – the speed and pace – of the mining that takes place. The gold rushes of the 19th century stand out for that reason, and they were also notable for triggering huge transfers of population, which in turn resulted in the large-scale transfer of goods, capital, property and ideas.

The 19th-century gold rushes were also gold rushes because people thought of and experienced them as such. At the height of the California gold rush, for instance, the *New York Herald* described the public mind as having been set on the "highway to insanity". People became obsessed with the search for gold, so I think that makes the 19th-century gold rushes quite different from earlier periods of gold mining.

Q: What were the most significant gold rushes of the 19th century?

A: We tend to think of the California gold rush as the template for the great gold rushes of the 19th century, but I think it's best to think of this as a period of interconnected gold rushes taking place around the world, beginning with California in 1848 and ending with the Yukon gold rush roughly 50 years later.

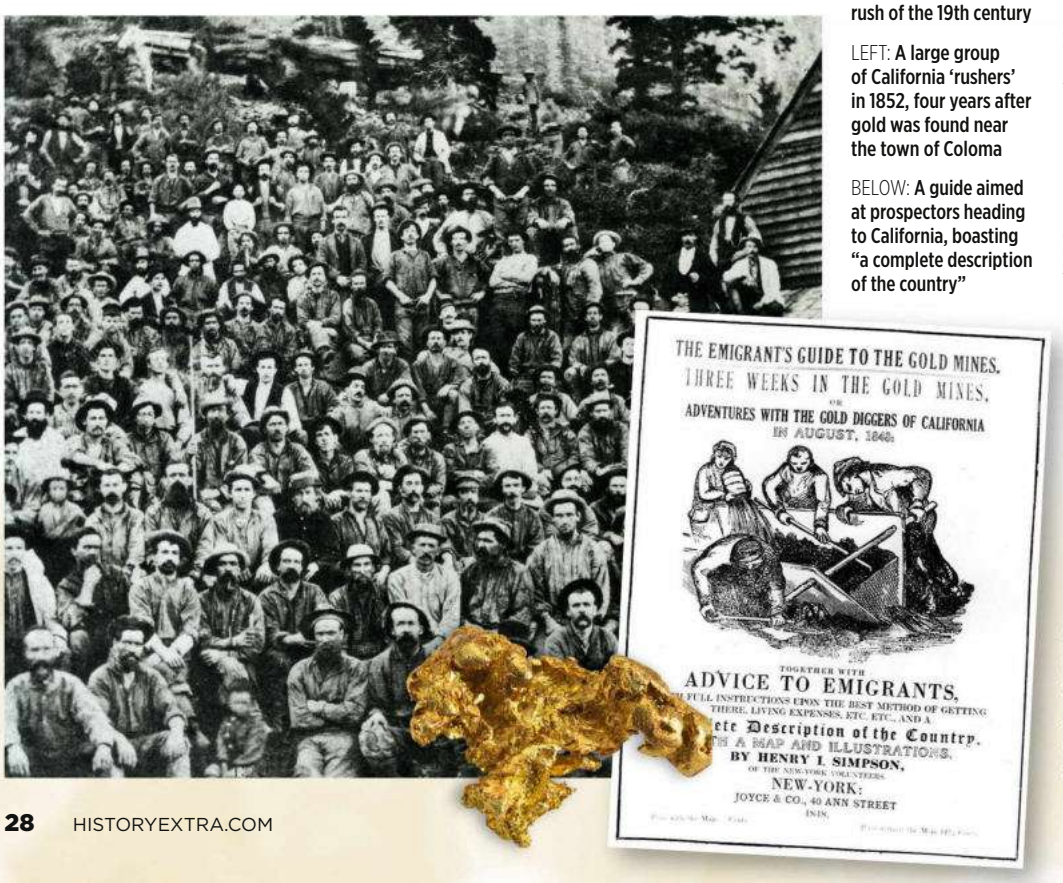
In the US, Nevada and California remained in a state of near-constant gold discovery, while Colorado, Wyoming and Montana experienced almost 40 gold rushes over the course of the period. Further afield, there was the Victoria gold rush in Australia from 1851, followed by gold rushes in five different New Zealand provinces – Nelson, Otago, Marlborough, Canterbury and Auckland – from 1857.

But gold rushes were not limited to North America and the southwest Pacific. The discovery of gold in the Ivalo River in Lapland triggered a gold rush to the region in 1868, while there was also a major gold rush that began in the Boer republics of southern Africa in 1886. There was even a small gold rush in Scotland, when Robert Gilchrist – a Scottish miner who had just returned from Australia – found gold on the Isle of Arran in 1869. After the Yukon gold rush in the 1890s, gold mining became much more capital-intensive and corporate.

ABOVE: **Miners at work during the Yukon gold rush – often thought of as the last great gold rush of the 19th century**

LEFT: **A large group of California 'rushers' in 1852, four years after gold was found near the town of Coloma**

BELOW: **A guide aimed at prospectors heading to California, boasting "a complete description of the country"**


THE EMIGRANT'S GUIDE TO THE GOLD MINES,
THREE WEEKS IN THE GOLD MINES,
OR
ADVENTURES WITH THE GOLD DIGGERS OF CALIFORNIA
IN AUGUST, 1849.
TOGETHER WITH
ADVICE TO EMIGRANTS,
BY HENRY I. SIMPSON,
NEW-YORK:
JOYCE & CO., 40 ANN STREET

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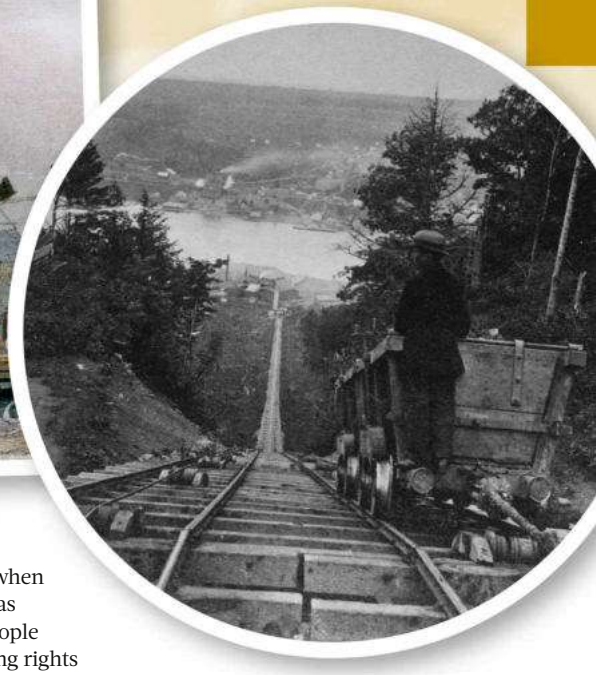


ABOVE: **An c1830 painting of a copper mine in Camborne, Cornwall. The search for minerals such as copper came to be more systematised as the 19th century went on, which also helped the search for gold**

RIGHT: **A man rides a cart at a Michigan copper mine, 1875. Having ready access to vast reserves of minerals was vital in the 19th-century global economy**

Q: Is it a coincidence that many of the areas that experienced gold rushes had seen a great deal of white European settlement and colonisation?

A: It is absolutely not a coincidence; the story of the gold rushes is fundamentally a story about white settler colonialism. The transformation of global trade and communication in the middle of the 19th century, particularly under the influence of the British empire, made it easier and cheaper for people to travel further distances, which in turn enabled these great battalions of gold rushes to move around the world.

Much like today, the economy of the 19th century was a mineral economy, and I think that's significant as well. The new systems of transportation that were emerging during this period depended on fossil fuels, while new methods of communication – such as the telegraph – required copper, so the search for minerals was important.

In places like Britain, these searches became highly systematised, with institutions such as the Geographical Society and the Geological Society sending out teams of explorers to locate and map mineral deposits, which in turn enabled the search for gold to take place. In the battle of resources between empires, gold soon started to take centre stage.

Q: Were gold mining camps really as lawless as they are often depicted in popular media?

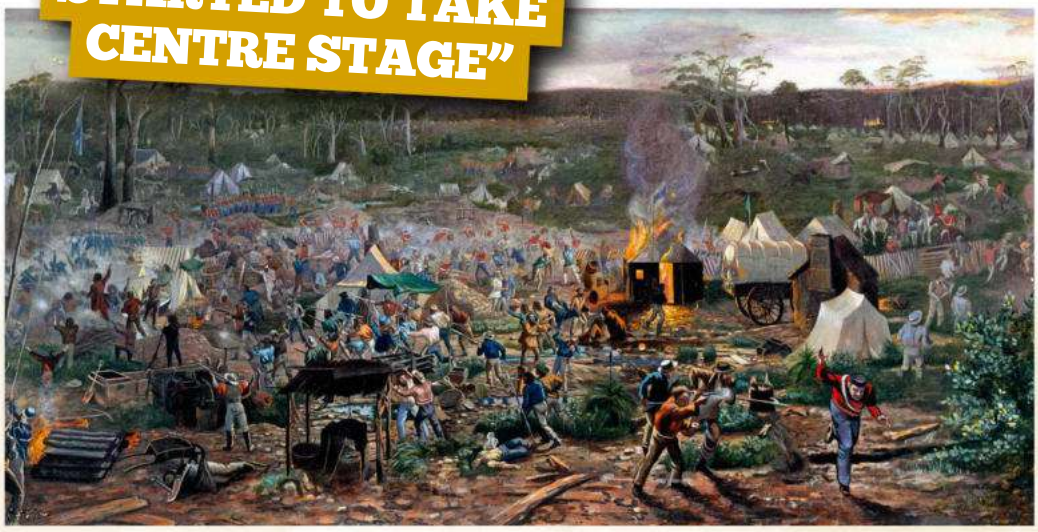
A: Yes and no. They could be incredibly violent places – whether that's down to the use of firearms or otherwise – but they weren't completely lawless. In California, for example, committees were formed to police behaviour in the goldfields, electing representatives that shaped laws and customs. And when there was violence, some of it was retributive: 'claim jumpers' – people who stole somebody else's mining rights or attempted to take over a mine for themselves – would be publicly hanged in a symbolic demonstration of the rules that governed gold rush society.

There are important distinctions to be made, though. What happened in California, where the American state was very absent for a large part of the gold rush phase, was quite different from what happened in places like Australia and British Columbia, where there was a very visible state presence for the whole period.

Australia, in particular, was very concerned about the importation of American violence into gold rush life. We can see this in how quickly the colonial authorities clamped down on the Eureka Stockade, an 1854 rebellion in which a group of miners in Ballarat, just outside Melbourne, attempted to overthrow the local government and form a republic. And of course, the land in Australia was owned by the Crown and granted to the miners by licence, which meant there was a more coherent system of governance regarding claims in the first place.

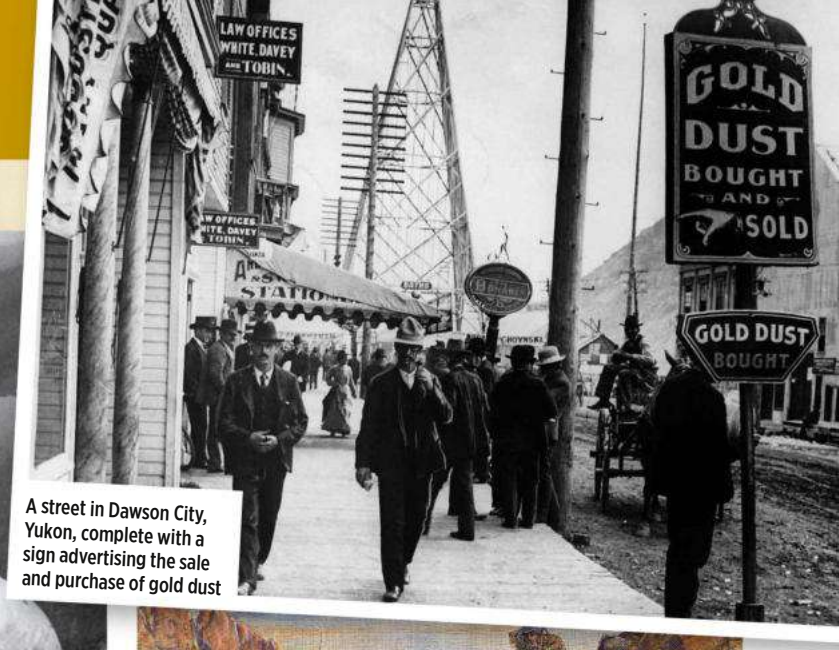
The violence witnessed in some of the camps was partly down to the composition of gold rush societies. Some of the first miners to join the California gold rush were people who had jumped ship: if you were to have visited San Francisco Harbour in 1849, you would have seen the rotting hulks of around 600 merchant ships, whose crews had fled to the goldfields. And they took with them a very aggressive type of ▶

"IN THE BATTLE OF RESOURCES, GOLD STARTED TO TAKE CENTRE STAGE"

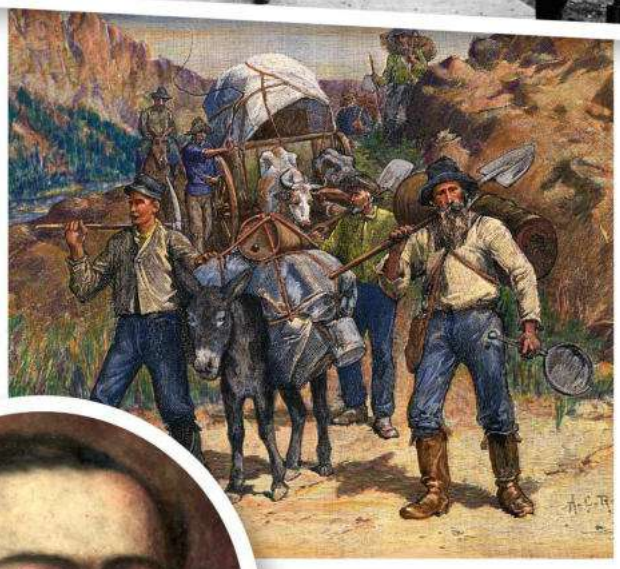


The battle of the Eureka Stockade, fought between rebel miners and the colonial authorities in Ballarat, Victoria, resulted in 27 deaths

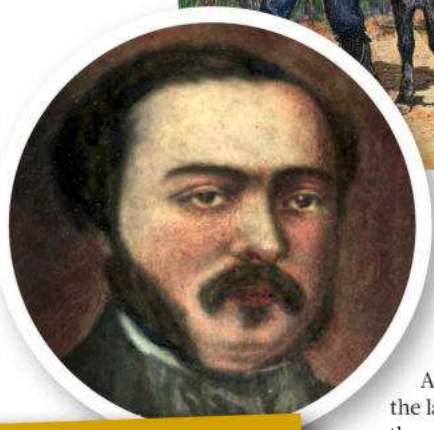
Collaborating with fellow prospectors, rather than going it alone, often ended up proving more cost effective



A street in Dawson City, Yukon, complete with a sign advertising the sale and purchase of gold dust



ABOVE: **US prospectors heading west could find themselves weighed down by heavy equipment they didn't necessarily need**



LEFT: **William Leidesdorff made a fortune out of his investments in San Francisco land**

◀ crew culture, which revolved around gambling and acts of violence.

There were also frequent clashes between the early California gold rush migrants and those who arrived from the east coast later on, who tended to be much more middle class and brought with them a whole set of values about how society should be governed. The vigilance committees that began to form in San Francisco during the early 1850s – which sought to root out so-called criminal gangs and bring about a sense of order – were a visible manifestation of that.

Q: What percentage of miners actually made any real money from their activities?

A: Very few. During the California gold rush, the typical miner earned around $1 a day, which made things difficult when their lodgings might have cost as much as $3 a day. This is why lone prospectors were soon replaced by groups of people working collaboratively; it was more cost-effective to be part of a company.

Of course, some people did get very rich. One of the most famous examples is a Scottish miner named James Brookmire, who, in 1848, sold his farm in Pennsylvania and went to California. Four years later he returned to Pennsylvania with $15,000 in gold dust – the equivalent of more than $575,000 today.

People like Brookmire were few and far between, and most people were only making enough to live – but it was the hope that they might one day get lucky that drove them on.

Q: Was there much money to be made in subsidiary economies?

A: Definitely. I think the real money was made by the people who were supplying the gold rushes: both in the metropolitan areas where prospectors were leaving, and then in the societies in which they arrived.

"IT WAS THE HOPE THAT THEY MIGHT ONE DAY GET LUCKY THAT DROVE THEM ON"

Outfitters providing mining equipment in, say, a town like Independence, Missouri, before people set off on the Overland Trail to California, raked in a lot of money because they were able to convince miners that they needed a lot of unnecessary equipment – equipment that they couldn't even really carry over vast distances. Offering board and lodging to gold miners could be quite lucrative, while businesses that were part of the travel industry – such as the steamship companies – profited too.

A lot of money was also made in the land speculation that accompanied the gold rushes, with the early movers who bought up city plots in places like Melbourne, San Francisco and Denver, Colorado, seeing their land gain enormous value. A famous example would be someone like William Leidesdorff, who, in 1846, invested $2,000 in San Francisco land. By 1855, the value of his original investment had risen to $27,000 (the equivalent of nearly $1m today).

Q: What was the impact of gold rushes on indigenous populations?

A: What was considered by many to be the greatest piece of luck in US history was the greatest disaster for the country's indigenous population. The native population of California – mainly comprising the Yuki, Nisenan and Konkow peoples – numbered about 150,000 in 1848. It had already seen

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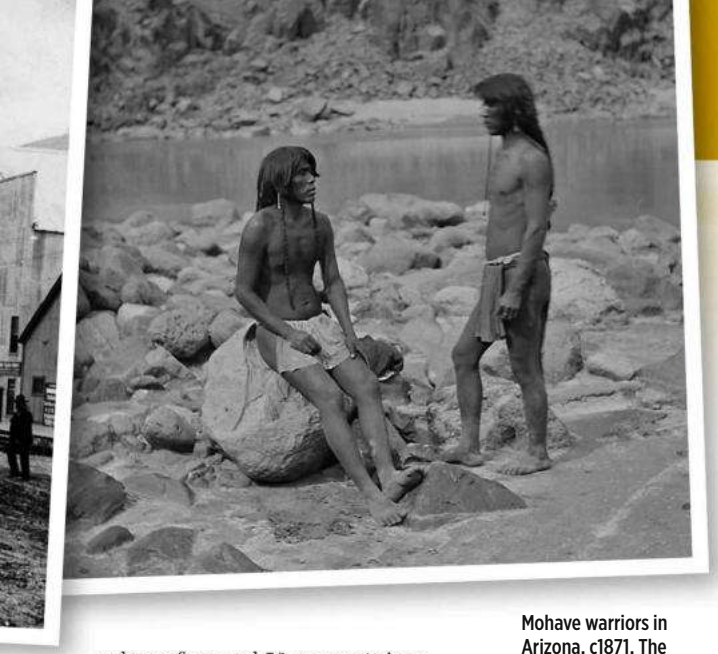


Mohave warriors in Arizona, c1871. The California gold rush, which saw prospectors passing through indigenous territory, sparked tensions between the Mohave people and the US government, leading to a war in 1858–59

a drop of around 50 per cent since Spanish settlement in the 17th century, but that was nowhere near the cataclysmic drop in numbers that occurred during the gold rush. In the six years after 1848, the indigenous population shrank by around two thirds, and by 1880, it had fallen to just 16,000.

In part, the decline was brought about by the destruction of the native foodways and lifeways that had offered indigenous communities a high standard of living. During the gold rush, the topsoil was removed from the land, the rivers were polluted, and there was a collapse in fish populations. The gold rush also brought contact diseases that they hadn't experienced before, like measles, which contributed to the high mortality rate.

But more significant than that, I think, was the direct assault that took place on indigenous Californians by the California state government. In the Round Valley, for example, there were government-backed militias that went out to 'hunt' indigenous people. The customers of some of the early California banks could even take out bonds and invest in these militia groups, which were paid according to the number of people that they killed.

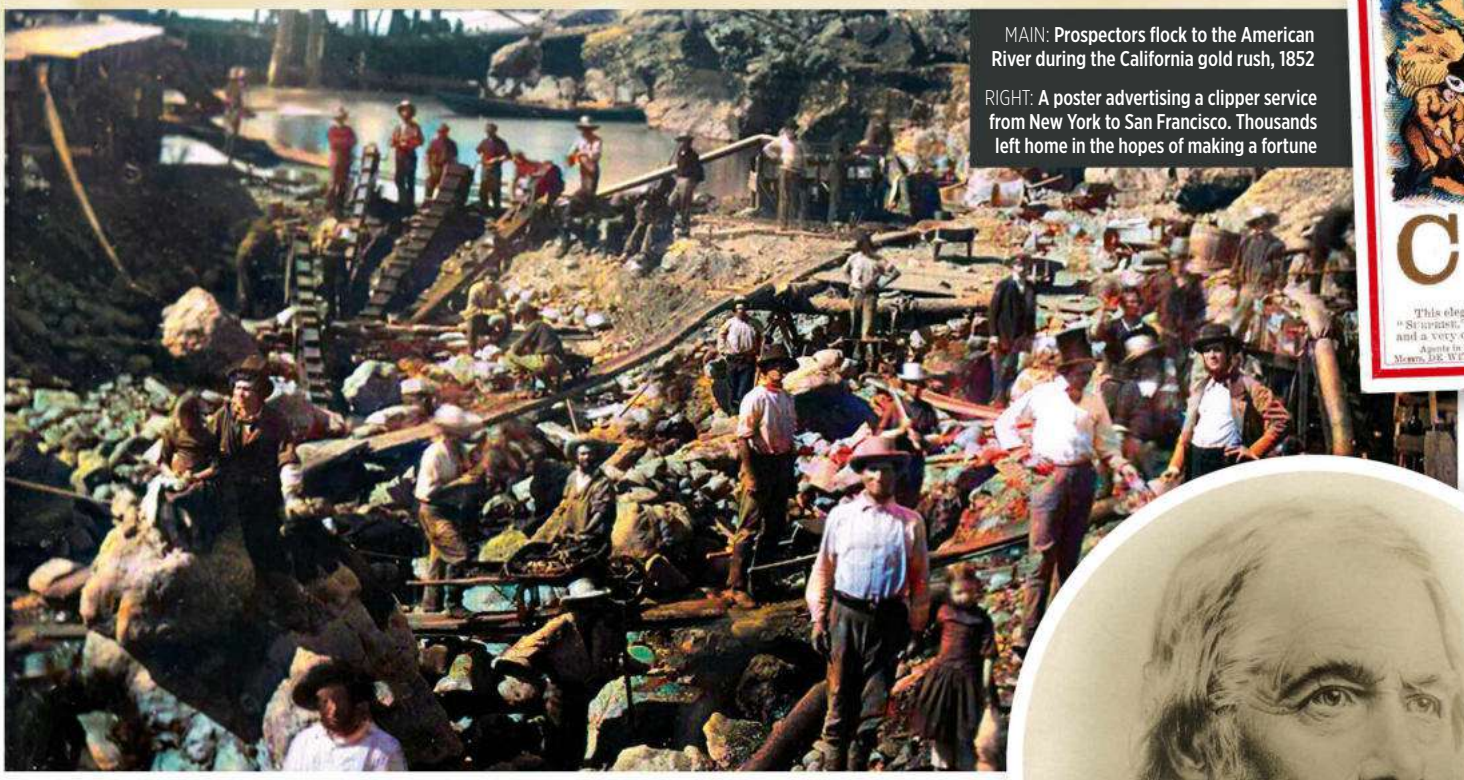
It was a slightly different story in southern Africa, where the capital and labour-intensive nature of corporate mining meant that the solution to controlling costs was to employ people as cheaply as possible. Overwhelmingly, they turned to black African labour, with recruiters sent out across the region to hire workers from indigenous communities. In order to 'control' the workforce, the white mining authorities built compounds where they could house the labourers and ensure they worked out their contracts. Soon, the authorities began to introduce laws that restricted their movements even further, laying the early foundations of apartheid.

The advent of gold mining was destabilising to black societies, and contributed to some of the revolutions that were already taking place in southern Africa, as groups like the Zulu and others fought one another for control. By 1910, the recruiting system was bringing black labourers from as far away as Mozambique and the Congo, with about 200,000 people arriving in the gold mines each year.

INTERVIEW: ELLIE CAWTHORNE
WORDS: CHARLOTTE HODGMAN

DR STEPHEN TUFFNELL is associate professor of modern US history at St Peter's College, University of Oxford, and the author of *Made in Britain: Nation and Emigration in Nineteenth-Century America* (University of California Press, 2020)

Black, white and Chinese labourers in a southern African gold mine during the late 19th or early 20th century. Workers were hired as cheaply as possible, and often housed in compounds

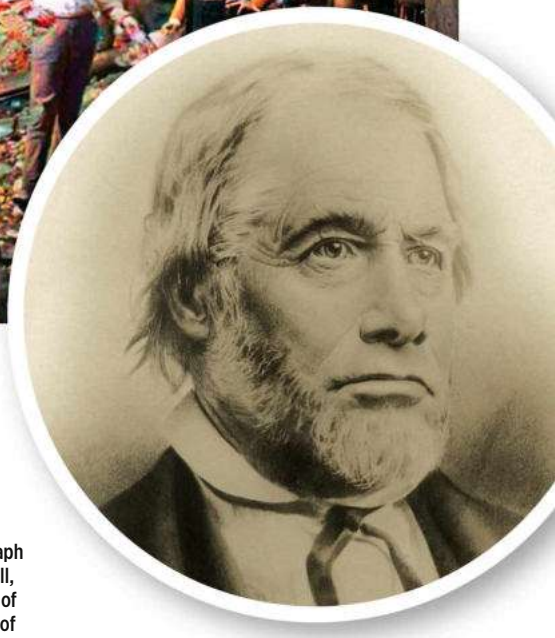


MAIN: **Prospectors flock to the American River during the California gold rush, 1852**

RIGHT: **A poster advertising a clipper service from New York to San Francisco. Thousands left home in the hopes of making a fortune**

GOING WEST

One man's chance discovery would put California firmly on the map – and change the course of US history



RIGHT: **A photograph of James Marshall, whose discovery of gold in the town of Coloma saw 'rushers' descend on California**

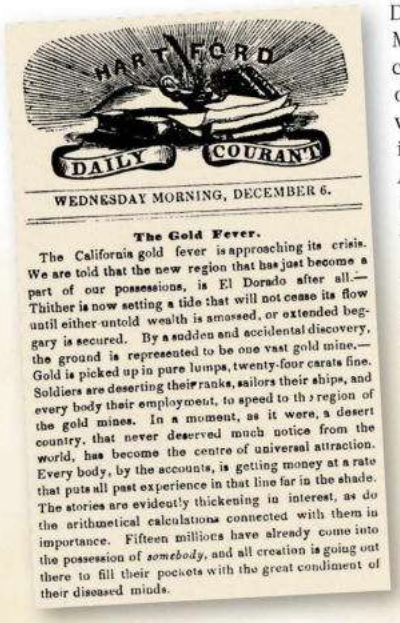
BELOW: **An article in the *Hartford Daily Courant*, a Connecticut newspaper, discusses the gold fever of 1848**

They say that all that glitters isn't gold. But the tiny pieces of metal that a carpenter named James Marshall spotted glistening in the sun on 24 January 1848 certainly were gold – and their discovery would change the course of American history.

Marshall wasn't searching for precious metal on that winter's day. He was working on a new sawmill in the small Californian town of Coloma. Yet he instantly knew what he had found. "It made my heart thump, for I was certain it was gold," he later reported. It's little wonder that Marshall's heart skipped a beat, for the flakes that he spotted in a streambed adjacent to the American River would spark one of the most extraordinary events of the mid-19th century. It was an episode that would make some people fantastically rich, inflict misery on others, and transform life on America's western seaboard for good. We are, of course, talking about the California gold rush.

In the 21st century, news of Marshall's find would race round the world faster than a prospector could say "gold fever". Back in 1848, however, it was a far slower process. In nearby San Francisco – then a small port-town – whispers that there were large quantities of gold lying on the banks of the American River were initially greeted with scepticism.

Yet, slowly but surely, excitement grew – stoked by men like Samuel Brannan, a local storekeeper with a sharp eye for a business opportunity, who paraded through San Francisco holding aloft a vial of gold obtained from Sutter Creek. By the summer, three-quarters of the town's male population had abandoned their shops and businesses for the gold mines popping up along the American River.



HARTFORD
DAILY COURANT

WEDNESDAY MORNING, DECEMBER 6.

The Gold Fever.

The California gold fever is approaching its crisis. We are told that the new region that has just become a part of our possessions, is El Dorado after all.—Thither is now setting a tide that will not cease its flow until either untold wealth is amassed, or extended beggary is secured. By a sudden and accidental discovery, the ground is represented to be one vast gold mine.—Gold is picked up in pure lumps, twenty-four carats fine. Soldiers are deserting their ranks, sailors their ships, and every body their employment, to speed to the region of the gold mines. In a moment, as it were, a desert country, that never deserved much notice from the world, has become the centre of universal attraction. Every body, by the accounts, is getting money at a rate that puts all past experience in that line far in the shade. The stories are evidently thickening in interest, as do the arithmetical calculations connected with them in importance. Fifteen millions have already come into the possession of *somebody*, and all creation is going out there to fill their pockets with the great condiment of their diseased minds.

PAVED WITH GOLD

During the autumn of 1848, Marshall's discovery began to cause a hubbub on the east coast of America. One Californian letter writer in September that year informed the *Philadelphia North American*, rather smugly: "Your streams have minnows and ours are paved with gold."

Yet despite such gloating, many east coasters couldn't shake their suspicions that the news coming out of San Francisco was a case of west coast hyperbole. All that changed in December 1848 when, in his State of the Union address, no less a personage than US president James Polk confirmed that gold had indeed been found in California.

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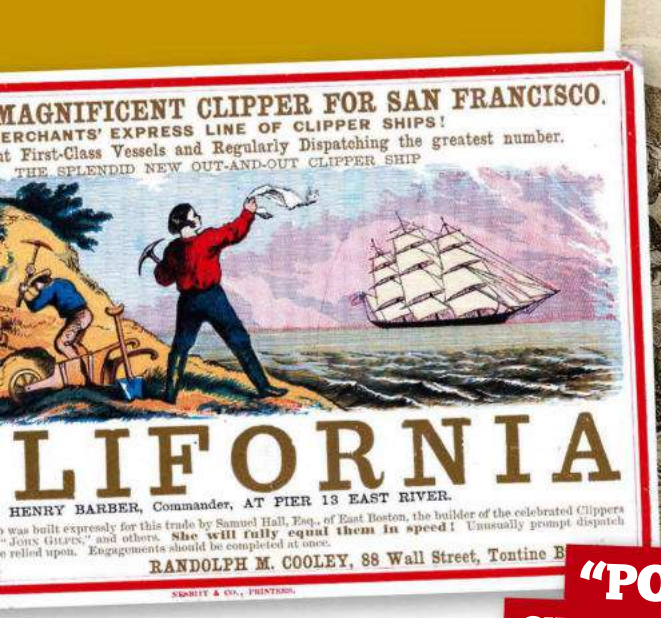
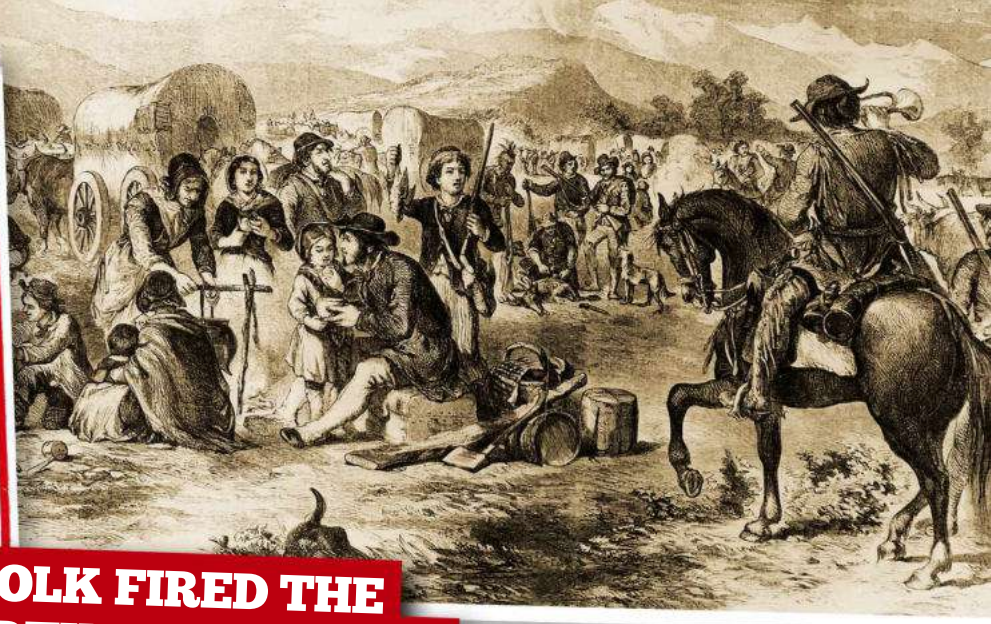

MAGNIFICENT CLIPPER FOR SAN FRANCISCO.
ERCHANTS' EXPRESS LINE OF CLIPPER SHIPS!
t First-Class Vessels and Regularly Dispatching the greatest number.
THE SPLENDID NEW OUT-AND-OUT CLIPPER SHIP
LIFORNIA
HENRY BARBER, Commander, AT PIER 13 EAST RIVER.
RANDOLPH M. COOLEY, 88 Wall Street, Tontine



"POLK FIRED THE STARTING PISTOL ON A FULL-BLOWN – AND GLOBAL – GOLD MANIA"

ABOVE: **Gold seekers travelling west by land faced a gruelling journey that could take at least six months**

BELOW: **A San Francisco street depicted during the gold rush. By 1870, the local population had ballooned to nearly 150,000, from 36,000 in 1852**

"The accounts of abundance of gold are of such an extraordinary character as would scarcely command belief were they not corroborated by the authentic reports of officers in the public service," Polk observed. In a stroke, he fired the starting pistol on a full-blown – and global – gold mania.

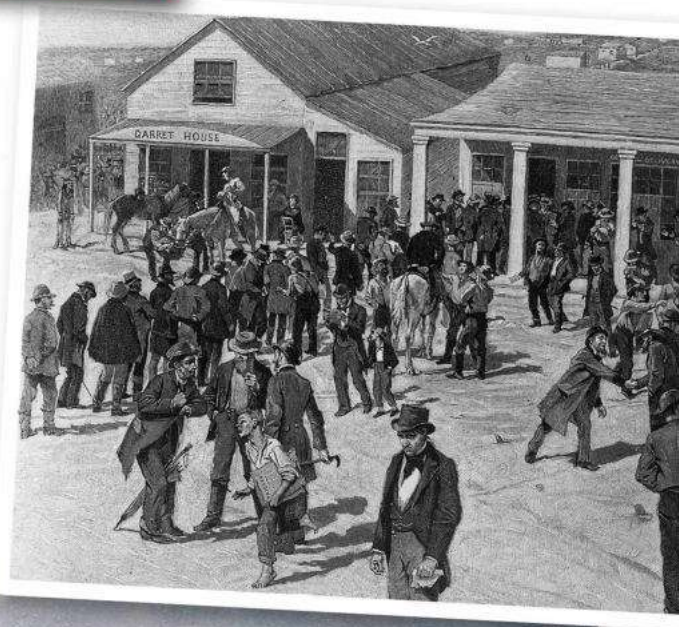
Before Polk delivered his address, prospectors had already been descending on the Californian goldfields from Oregon, Hawaii, Mexico, Chile and Peru. Now they were joined by men from nations as far-flung as Britain (including a contingent of Cornish tin miners), France, Germany, Ireland, Australia and China. But around half came from the US. Thousands upon thousands of American men left wives, children, businesses and workplaces behind and headed west in search of their fortune. In doing so, they participated in one of the most significant migrations in US history.

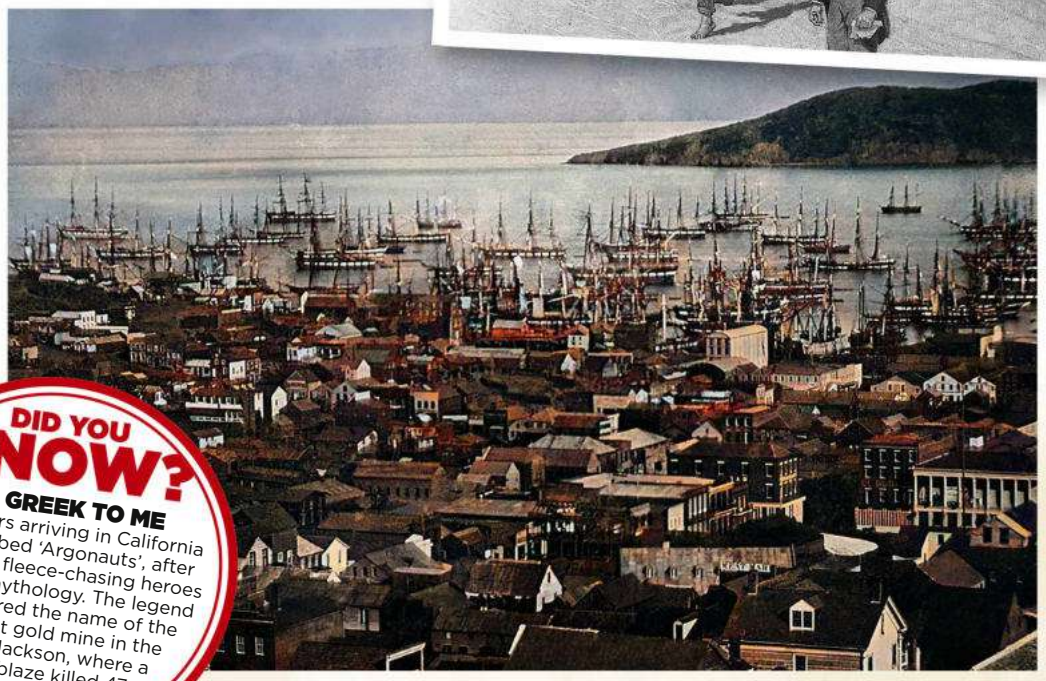
RISKING EVERYTHING

Some climbed aboard covered wagons pulled by mules and ventured across America's vast hinterland, a journey that could take more than six months. Others boarded steamers and set off on mammoth voyages that took them to America's west coast via the tip of South America, or they disembarked at Panama and journeyed across its jungle. Between many would-be prospectors and the goldfields lay the Sierra Nevada mountains, where some perished at the hands of extreme cold or searing heat.

One of those to make the journey was a Mr Shufelt, who boarded the steamer *Panama* in New York City along with about 200 fellow fortune hunters in May 1849. In a letter to his cousin, Shufelt wrote: "I have left that that I love as my own life behind and risked everything... I want to make enough to live easier and do some good with, before I return."

Less than 10 years before Mr Shufelt wrote these words, California was a sparsely populated corner of the North American continent, consisting of 150,000 Native Americans, and a few thousand "Californios", descendants of Spanish and Mexican settlers. As for San Francisco, it had been a tiny town of just a few hundred people. The California gold rush changed all that. By 1852, San Francisco had become a city of just over 36,000. By 1870, that population had ballooned to nearly 150,000. And San Francisco wasn't the only place to be transformed by the tide of humanity that was washing up on its shores. Towns like Bode, Hangtown, Sucker Flat and Murderers Bar were popping up ▶



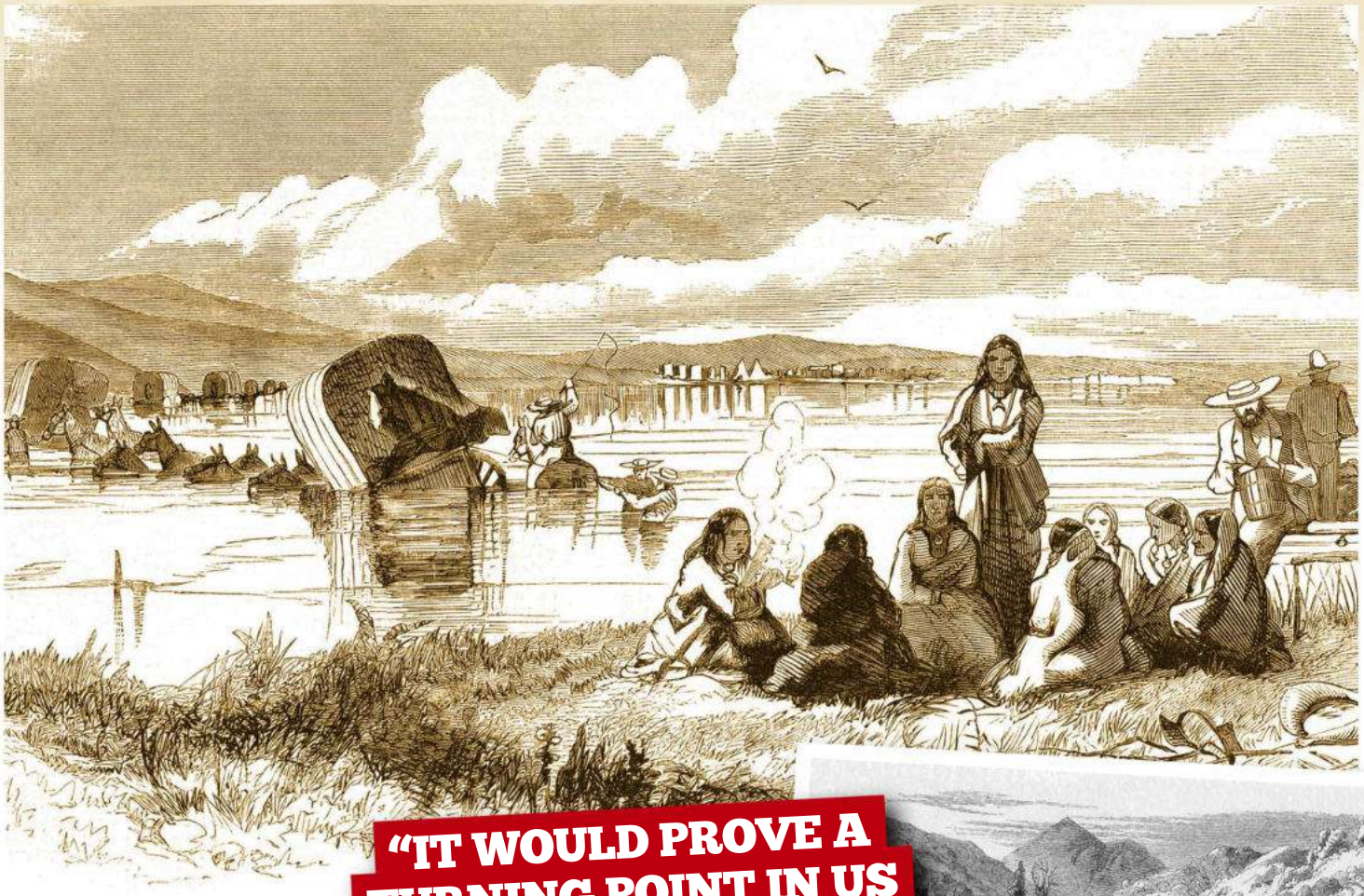


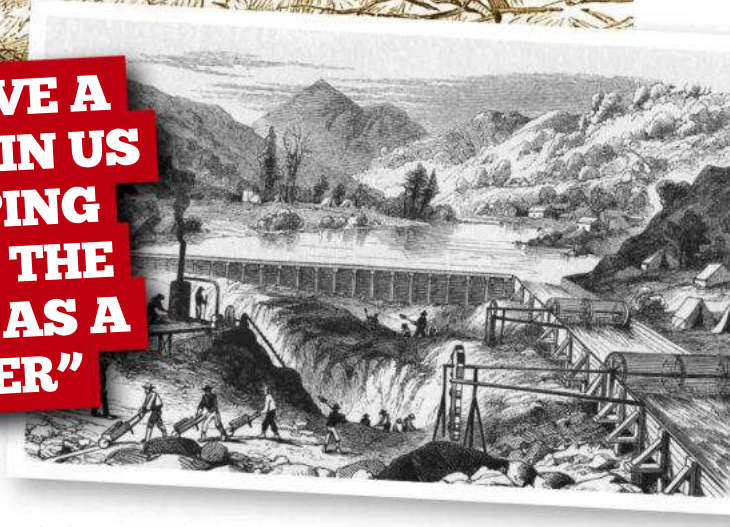
Ships seen filling San Francisco harbour in 1851. Some prospectors travelled from as far afield as Europe

DID YOU KNOW?

ALL GREEK TO ME

The rushers arriving in California were dubbed 'Argonauts', after the golden fleece-chasing heroes of Greek mythology. The legend also inspired the name of the Argonaut gold mine in the city of Jackson, where a huge blaze killed 47 miners in 1922.





"IT WOULD PROVE A TURNING POINT IN US HISTORY, HELPING SUPERCHARGE THE NATION'S RISE AS A GLOBAL POWER"

in every nook and cranny near the goldfields. Dots on the landscape grew into sprawling, unruly, ramshackle towns.

As Mr Shufelt recalled in one of his letters: "We hired an ox team to carry our baggage and started for this place then called Hangtown, from the fact that three persons had been hung here for stealing and attempting to murder. We pitched our tents, shouldered our picks and shovels and with pan in hand sallied forth to try our fortunes at gold digging."

The thousands who converged on California in the late 1840s and early 1850s were there for one reason: to strike gold. But how many achieved it? Were they being sold a genuine shot at untold riches, or a pipe dream?

At the height of the gold rush, the military governor Colonel Richard B Mason dispatched a report back to Washington in which he claimed that two miners on Weber Creek had gathered $17,000 in gold in seven days, and that six miners with 50 Native Americans had garnered 273 pounds of the precious metal.

There's little doubt that staggering amounts of money was liberated from the rivers and creeks of California as the gold rush raged. Some $600m was found between 1848 and 1860 – that's the equivalent of tens of billions today. From 1848–51, the amount of gold coinage in circulation across the US jumped 20-fold.

A DESTRUCTIVE IMPACT

Yet those who returned home from California rich beyond their wildest dreams were in the minority, and they became even less numerous as more and more people arrived to compete over ever-diminishing reserves of gold. And, while the image of the lone prospector panning for nuggets may have been true of the early days of the gold rush, soon the majority would be engaged in back-breaking work for somebody else. By the 1850s, the sieve and wash basin had been replaced by vast hydraulic mining operations that washed away entire hillsides, and enormous quantities of explosives that blasted other hillsides into oblivion (*see page 46*).

Such practices wreaked havoc on the environment. The California gold rush has been described as a vast international stag party that came in and trashed the landscape. With 12 million tonnes of earth dug out for mining purposes, huge dams constructed, water supplies diverted from farms to mines, and vast amounts of mercury introduced to California's river system, the state continues to bear the scars of the gold rush today.

The impact on the region's Native American population was even more catastrophic. Racism was rife in the

TOP: **Some prospectors travelled back inland during the Colorado gold rush (1858–61); here, a wagon crosses the Platte River while a group of indigenous women look on**

BOTTOM: **Dwindling reserves of gold led mining companies to develop increasingly more destructive extraction methods**

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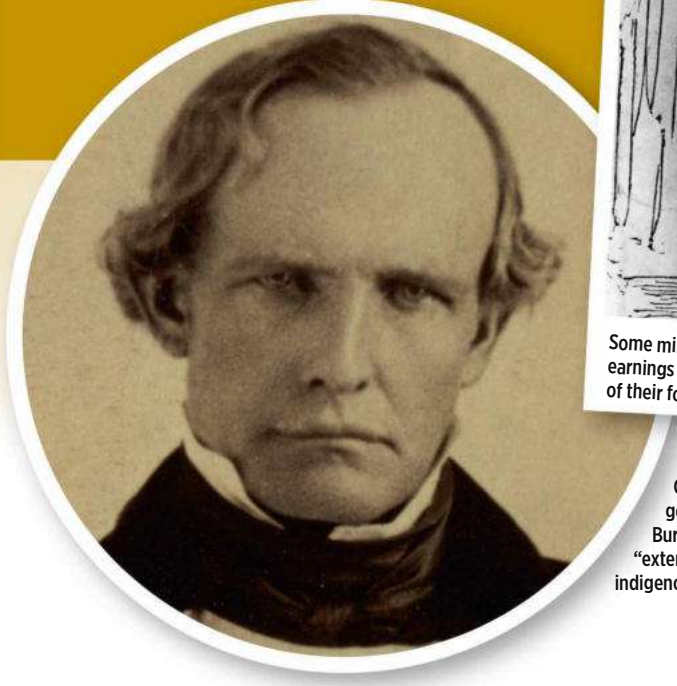
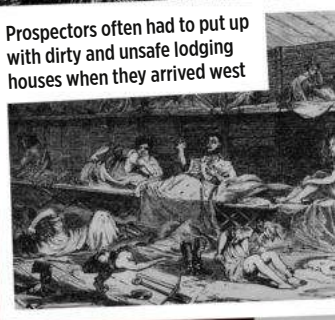


California's first elected governor, Peter Hardeman Burnett, openly advocated the "extermination" of the state's indigenous population

Some miners gambled away their earnings – or were scammed out of their fortunes by con artists



Prospectors often had to put up with dirty and unsafe lodging houses when they arrived west

mining communities of California, and its indigenous population was all too often the target. They had their land forcibly seized from them, they were routinely sold into slavery, they were hunted down and murdered by vigilante groups – all sanctioned, often encouraged, by the authorities.

Peter Hardeman Burnett, who served as the first elected governor of California from 1849–51, openly advocated the wholescale extermination of the state's Native American population. With 120,000 dying of disease, starvation and murder during the gold rush, it was a wish that was so nearly realised.

While the California gold rush was devastating for Native Americans, it would prove a turning point in US history, helping supercharge the nation's rise as a global power. Just over a week after James Marshall discovered gold near Coloma, Mexico signed the Treaty of Guadalupe Hidalgo in which it ceded California to the United States. It was a remarkable twist of fate. Within a few years, that newly acquired parcel of land had become an economic powerhouse, triggering a massive boom in farming and trade, helping inspire the building of a transcontinental railroad and persuading millions of white Americans that it was their manifest destiny to settle all of America, sea to shining sea. By the end of the 19th century, America's economy had outgrown Britain – with no little help from Marshall's fateful discovery.

There were many losers in the California gold rush. There were winners too, whether they were Cornish miners or New Yorkers with a get-rich-quick dream. But the biggest beneficiary of all may have been America itself.

WORDS: SPENCER MIZEN

California's booming economy helped spur on completion of the first transcontinental railroad in 1869

HARD GRAFT

Law and order was certainly lacking in California's goldfields

"There is a great deal of sin and wickedness going on here: stealing, lying, swearing, drinking, gambling and murdering." These words, penned by a prospector called Mr Shefult in a letter to his cousin, paint a vivid picture of life on the front line of the California gold rush.

Mr Shefult may have been horrified by what he witnessed, but he could hardly have been surprised. Take thousands of young men and ask them to live cheek by jowl in a series of sprawling, ramshackle communities in which alcohol flowed as freely as the nearby American River and law enforcement was notable only by its absence, and you've hardly got a recipe for virtue and propriety.

As the number of prospectors swelled on America's west coast in the late 1840s, so did the brothels, gaming houses and saloon bars required to service their needs. Bandits, claim-jumpers and professional scammers preyed upon those desperate to make their fortunes. Prospectors walking around with gold nuggets in their pockets (there were, after all, no banks in which to deposit your newfound wealth) proved easy pickings for opportunistic thieves.

Many of those who arrived in California at the height of the gold rush were already severely weakened and malnourished by the treacherous journey across the Sierra Nevada mountain range. Yet for many, life in their new home was about to get even tougher. They slept in tents, ad hoc accommodation, even on the decks of ships. They often saw the price of food and supplies sky-rocket as traders cashed in. And when they waded into the freezing waters of California in search of precious metal, they were often confronted with hours of arduous labour, digging dirt and moving rocks.

As the amount of gold in the river beds of California diminished, and more prospectors arrived on the scene, competition grew more intense – and violent. Men fought over the rights to pan particular parcels of the goldfields; others sprinkled flecks of gold around a riverbank and then sold the rights to it for an exorbitant price, claiming they'd struck gold there; vigilante groups meted out summary punishments, often targeting immigrants.

The California gold rush may have dangled the carrot of extraordinary riches in front of those willing to grasp the opportunity. But, as Mr Shefult observed in his letter to his cousin, it also showed "what a poor frail being man is, how liable to disappointments, disease and death."

A Chinese prospectors' camp during the California gold rush. Around 24,000 men are thought to have ventured to the US state from China between 1849 and 1853

CHASING THE AMERICAN DREAM

Being a prospector during the California gold rush was by no means plain sailing, but non-white arrivals had it especially tough

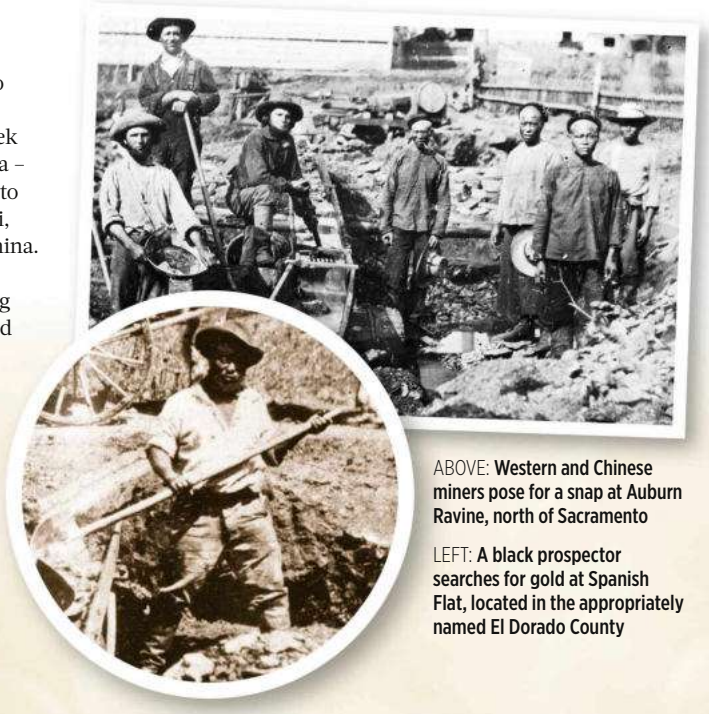
When picturing a "forty-niner", one of the treasure seekers who travelled to California in search of gold and glory, your mind might conjure up a sun-burned white man with a tangled beard and a gold pan dangling from his hand. While almost 80 per cent of prospectors were white east coasters, thousands of newcomers to California also poured in from across the globe.

In early 1848, around the same time that the first cries of "gold" rang out in California, there were only around 157,000 people in the region. Of that number, 150,000 were Native Americans, 6,500 were of Spanish or Mexican descent and the rest – only a few hundred – were recent European settlers. As news of the gold seeded in California's valleys spread via ships, though, people began to flock to the region.

The early wave of prospectors heralded not from other areas of America – Americans who wanted to leave their lives behind in search of riches faced a long and dangerous trek across the country to reach California – but from territories easily accessible to the shoreline by boat, such as Hawaii, Mexico, Peru and – significantly – China.

A huge proportion of prospectors originating from overseas were young Chinese men – around 24,000 arrived between 1849 to 1853. Many came from the country's southern coastal provinces, which were wracked by instability following the Taiping and anti-Manchu rebellions. California held the promise of riches and new opportunities for themselves and their families.

When they arrived, though, the reality of life in the mining outposts often failed to match their

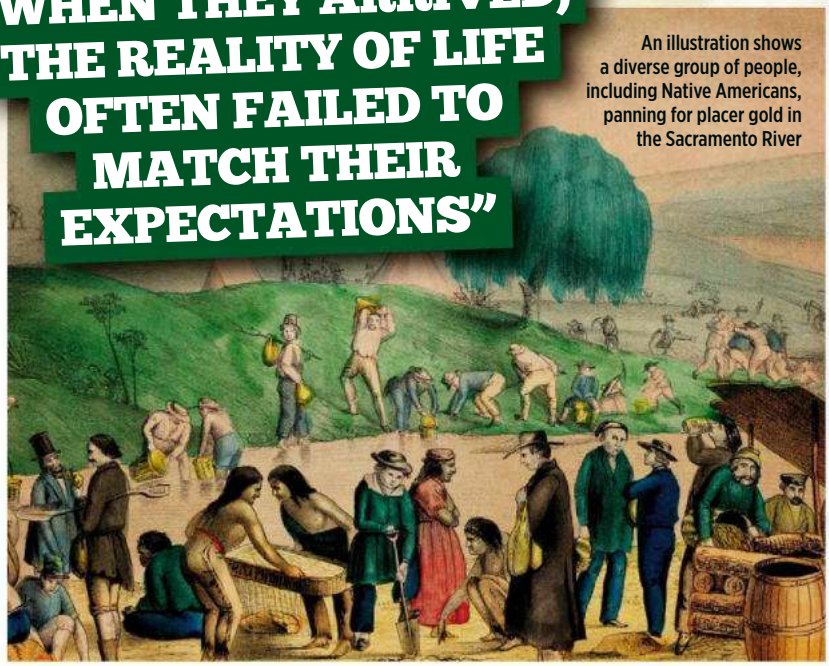


ABOVE: **Western and Chinese miners pose for a snap at Auburn Ravine, north of Sacramento**

LEFT: **A black prospector searches for gold at Spanish Flat, located in the appropriately named El Dorado County**

GETTY IMAGES X4, ALAMY X4

"WHEN THEY ARRIVED, THE REALITY OF LIFE OFTEN FAILED TO MATCH THEIR EXPECTATIONS"



An illustration shows a diverse group of people, including Native Americans, panning for placer gold in the Sacramento River

Some new arrivals, such as these Chilean emigrants in San Francisco, faced violent vigilante attacks

expectations. Non-Europeans in general were often regarded with suspicion – for instance, although California had actually been part of the Mexican empire until 1848, the Mexican prospectors that moved in during the gold rush were treated as foreigners. A small number of African-Americans were also drawn to the territory: while many arrived as enslaved people, they used the money they amassed in California to buy freedom for themselves or other enslaved people.

VIOLENCE AND VITRIOL

As more people arrived in the region and competition for gold claims intensified, anti-immigrant feeling ignited. In 1850 a monthly tax was briefly introduced that only applied to foreign miners, who were forced to give $20 a month (equivalent to around $500 today) to the state so they could be allowed to search for gold.

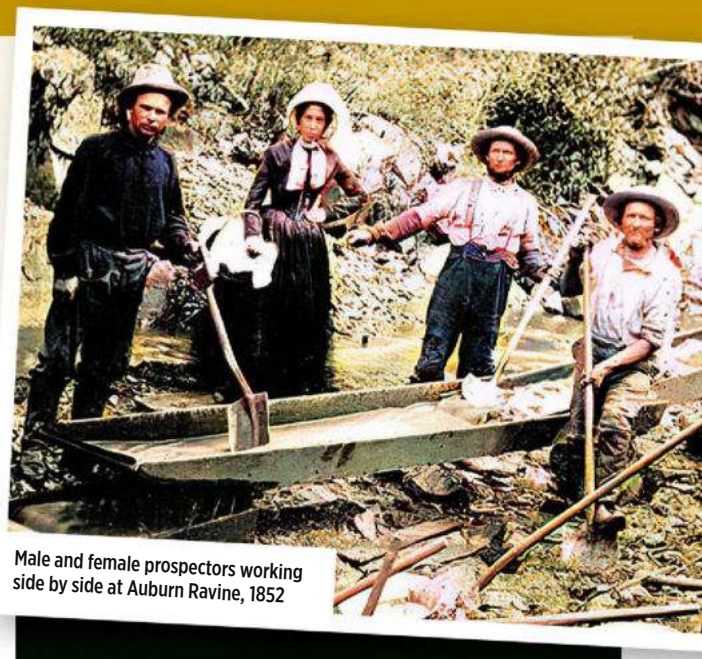
Lots of the vitriol was directed towards Chinese migrants in particular. The Foreign Miners' Tax was replaced by a tax that targeted Chinese labourers. As well as being penalised by the state, they were constantly at risk of violence. Samuel Bowles, a traveller to California, wrote: "To abuse and cheat a Chinaman; to rob him; to kick and cuff him; even to kill him, have been things not only done with impunity by mean and wicked men, but even with vain glory."

However, despite the injustices that awaited them, Chinese men continued to set sail for California. This only stopped in 1882, when the Chinese Exclusion Act was brought in – the first immigration law in America's history to specifically target one nation.

Although most of the Chinese prospectors planned to return home to share their riches and tales of adventure, for many there was no option but to stay – between the extortionate taxes and being muscled out by territorial white prospectors, they hadn't made enough money to pay for their passage home. Some got creative and looked for employment off the goldfields: the towns that sprang up across California created thriving industries that needed workers to sustain them. Working in laundries was a popular choice – perhaps because, according to legend, some lucky laundrymen would pluck out specks of gold hiding in the miners' dirt-encrusted clothes. Others became restaurateurs or shop owners.

As the gold rush came to a close, many Chinese prospectors took jobs building the railroads, and 'Chinatowns' cropped up across California, where people could buy familiar dishes and attend traditional temples. The new communities who had been first attracted to California by the lure of riches continued to fight against the odds and forge new and better lives for themselves in America, long after gold fever burned itself out.

WORDS: RHIANNON DAVIES



Male and female prospectors working side by side at Auburn Ravine, 1852

THE GOLDEN GIRLS

Men weren't the only people to seek fortunes way out west in California

Although the majority of prospectors were men, some women did up sticks and relocate to California in search of riches and adventure. In 1849, for instance, 700 women stepped onto the dock at San Francisco's harbour – out of 40,000 total passengers.

Some were determined to work in the goldfields, like Louise Clappe, who wrote: "I have become a mineress; that is, if the having washed a pan of dirt with my own hands, and procured therefrom three dollars and twenty-five cents in gold dust... will entitle me to the name." However, her first foray into gold panning wasn't quite what she'd dreamed of: "I wet my feet, tore my dress, spoilt a pair of new gloves, nearly froze my fingers, got an awful headache, took cold and lost a valuable breastpin, in this my labor of love."

Other women sought employment in the mining boomtowns that cropped up around the region, be it behind the bar, cooking for hungry miners, or working in brothels. Some American women's journals explicitly encouraged "moral" young women to head out to California, to provide a calming presence and curb the wild appetites of the male gold hunters.

Women were a visible presence in California's boomtown communities

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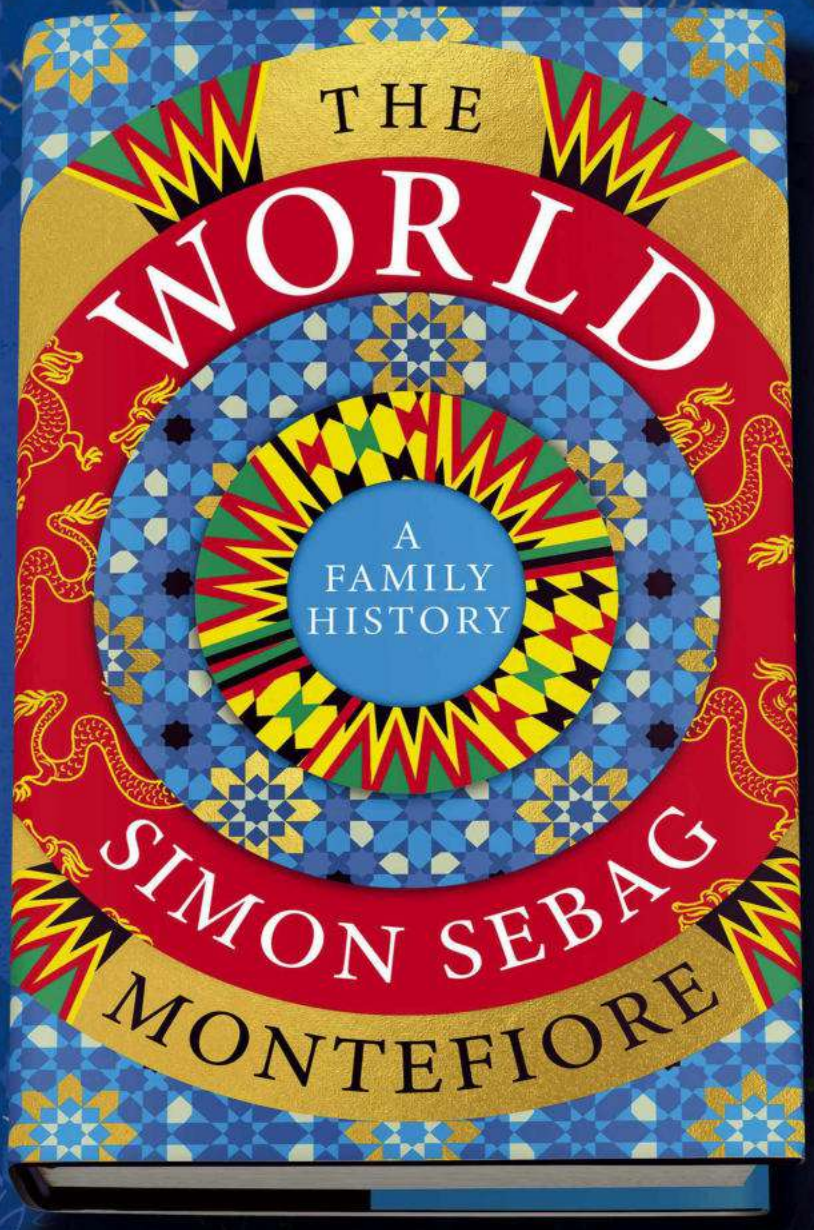

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GOLD FEVER GOES GLOBAL

California wasn't the only part of the world to witness a gold rush. From southern Africa to Alaska, prospectors searched – and found – the precious metal in abundance

VICTORIA, AUSTRALIA (1851–69)

In 1885, when visiting English journalist George Augustus Sala dubbed it "Marvellous Melbourne", Victoria's capital was enjoying a boom. Here was a growing southern city that was reputedly the world's richest – at least until a financial crash in 1893 brought an abrupt end to an era of brash boosterism.

To understand the swagger of so many Melburnians at this time, it helps to go back to 1850. This was the year when pastoralist, politician and financier William Campbell (1810–96) discovered gold on the station, or landholding, owned by his brother-in-law, Donald Cameron.

It wasn't the first time gold had been discovered in Victoria and the two men didn't immediately make the find public for fear of a gold rush impacting on their work as livestock farmers, but Campbell would subsequently be awarded a cash prize for being the first man to discover gold in Victoria.

By 1851, the genie was out of the bottle. As reports of further discoveries circulated, gold fever took hold. The scale of what happened is revealed in the growth of Melbourne. Between 1851 and 1854, its non-indigenous population shot up from 29,000 to 123,000. A vast tent city, Canvas Town, grew up in South Melbourne.

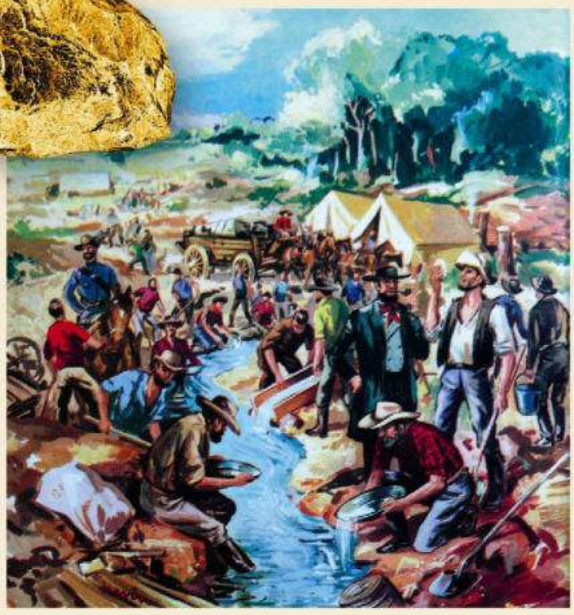
At first, the gold was so plentiful that it was said nuggets could be picked up off the ground at the Mount Alexander goldfield. Then there was alluvial gold in creeks and rivers, relatively cheap to recover by panning. As these deposits ran out, mining took over in earnest.

It wasn't just Victoria's economy that was transformed. Gold from the colony also generated sufficient inflation to reduce Britain's debt burden.

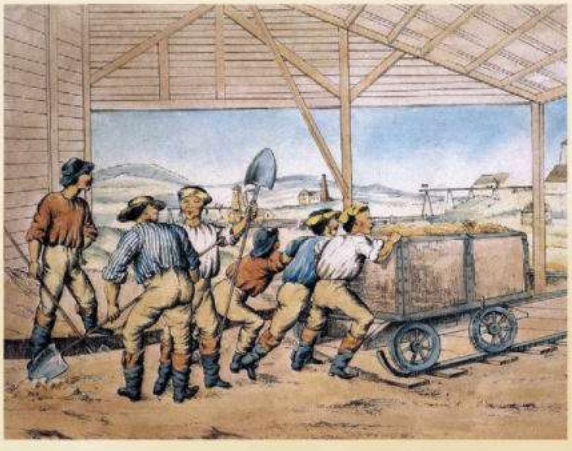
RACISM AND REBELLION

And yet gold brought problems too. In 1854, tensions over the way the nascent industry was administered, especially the cost of mining permits, bubbled over. On 3 December, the battle of the Eureka Stockade, fought between miners and the Victorian authorities, ended with 27 people dead. Subsequently, 13 rebel leaders were tried for high treason, but acquitted. The wider Eureka Rebellion has come to be seen – erroneously, some historians think – as key to the establishment of Australian democracy.

The gold rush revealed ugly racism. It's been estimated that as many as one fifth of Victoria's miners were Chinese. In 1855, Melbourne's *Argus* newspaper dubbed the Chinese an "invading army". There were anti-Chinese riots, most notably the 1857 Buckland riot, when Europeans attacked a larger Chinese population. The roots of the White Australia policy, which restricted non-European immigration in the early 20th century, lie in these years.



Australia experienced several gold rushes in the 19th century; in Mount Alexander, Victoria, it was said nuggets could be picked up off the ground



Around one-fifth of Victoria's miners were of Chinese origin, such as these labourers depicted at work in the Western Freehold Mine, Ballarat

GETTY IMAGES X2, ALAMY X2

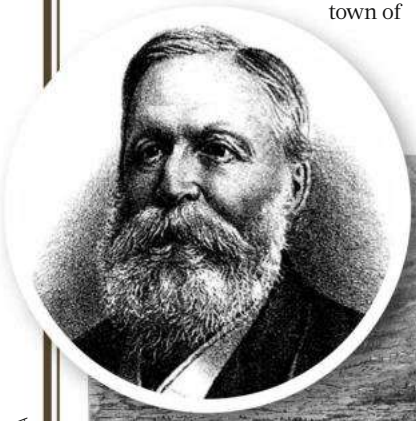
OTAGO, NEW ZEALAND (1861–64)

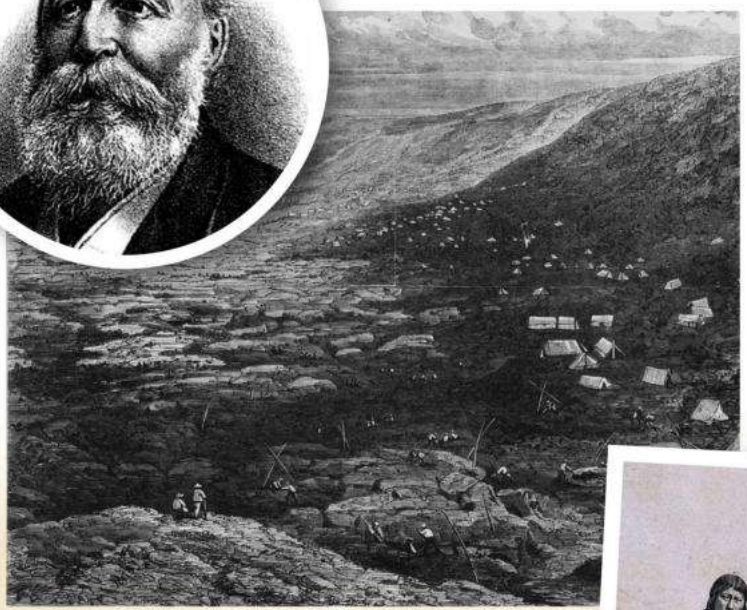
On 8 February 1861, Tasmanian gold prospector Thomas Gabriel Read (c1825–94) disembarked from the *Don Pedro II* at Port Chalmers, a settlement on Otago Harbour in New Zealand's South Island. A restless veteran of the Californian gold rush, he had travelled to what was then a remote locale after hearing rumours of gold being found in nearby Mataura, Southland.

Read was right to act on his hunch. On 23 May 1861, he found gold "shining like the stars in Orion on a dark frosty night" in the bed of a creek, a spot now known as Gabriel's Gully. In June, a letter published in the *Otago Witness* outlined his discovery. By Christmas 1861, as many as 14,000 prospectors had arrived to try their luck, including those deserting dwindling Australian goldfields.

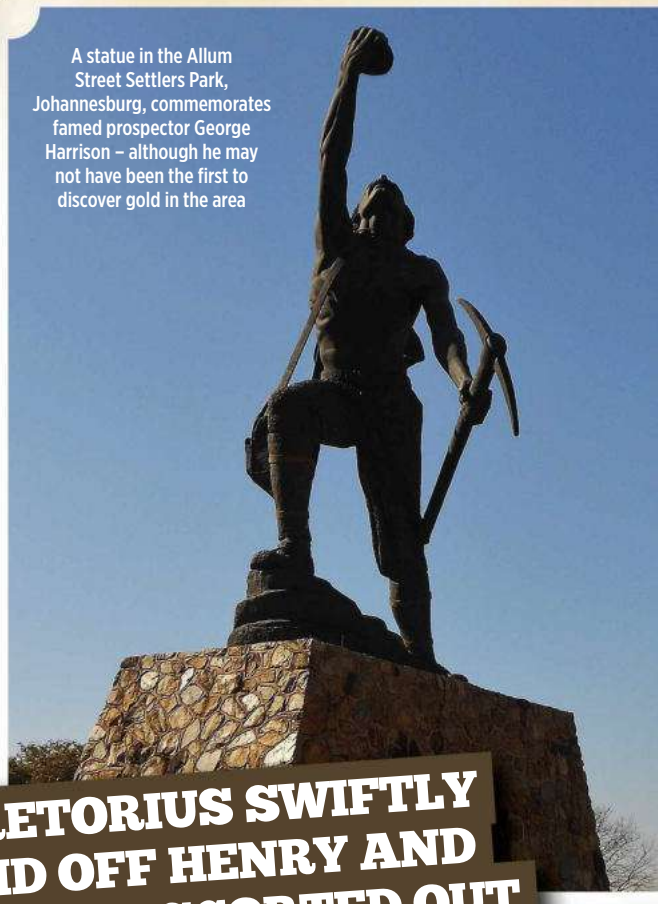
A second discovery, near the modern-day town of Cromwell, in 1862 encouraged further hopefuls, as did a strike on the banks of the Shotover River, a spot now named Arthurs Point after prospector Thomas Arthur. In 1864, there were 18,000 miners working in the region – some of whom went on to try their luck during the later West Coast gold rush (1864–67), which provided the backdrop for Eleanor Catton's Booker-winning novel *The Luminaries* (2013).

Yet for all this was a comparatively short-lived gold rush, over almost as soon as it had begun, it left its mark. Some of the grandest buildings in Dunedin, the second-largest city on South Island, were built during this period. The goldfields also funded the foundation of New Zealand's first university, the University of Otago, which began to take in students in 1871. And, a reminder that life goes on after the circus has left town, the *Dunedin* began its working life in 1881. This was the world's first steam-powered gold dredge, built to work the gravel beds of Otago's Clutha River, extracted 530kg of the shiny stuff.





Gold was discovered in Otago by Thomas Gabriel Read (*inset*), a veteran of the California gold rush. The area of the Tuapeka goldfields (*main*) where Read made his breakthrough was later dubbed 'Gabriel's Gully'



A statue in the Allum Street Settlers Park, Johannesburg, commemorates famed prospector George Harrison – although he may not have been the first to discover gold in the area

"PRETORIUS SWIFTLY PAID OFF HENRY AND HAD HIM ESCORTED OUT OF THE COUNTRY"

An abandoned gold dredge in Tierra Del Fuego, an archipelago that is split between Argentina and Chile

LEFT: An Selk'nam woman in Chile. The Tierra Del Fuego gold rush would prove devastating for the indigenous people living on the archipelago

RIGHT: Prospector Julio Popper actively participated in the Selk'nam genocide

GETTY IMAGES X5, ALAMY X4, THE MINER BY TIENIE PRITCHARD/DARLY NKUNA

WITWATERSRAND, SOUTHERN AFRICA (1886)

From the perspective of European settlers, the folklore of the indigenous peoples who lived on the plains of the southern African *highveld* called to mind El Dorado. This was a term initially used by the conquistadors to describe a South American tribal chief who supposedly covered himself in gold dust during an initiation service, but which later came to mean a lost, gold-rich empire.

As events in 1886 proved, the idea of an African El Dorado wasn't entirely fanciful. This was the year when George Harrison found gold at Langlaagte, now a suburb of Johannesburg. Although he sold his claim for just £10, Harrison had discovered part of the 60-mile "golden arc" that extends from Johannesburg to Welkom, an area rich in low-grade lode deposits.

History sometimes claims Harrison as being the first to find gold in the area, but that ignores the claims of, among others, Welsh mineralogist John Henry Davis, who found gold at Pardekraal farm, Krugersdorp in 1852. This was then part of the South African Republic, a Boer (Dutch for farmer) republic in southern Africa. Politician Andries Pretorius (1798–1853), fearful the discovery might destabilise the young nation, swiftly paid off Henry and had him escorted out of the country.

THE WRATH OF RHODES

Pretorius was right to be worried. The discovery of what turned out to be vast reserves of gold led to thousands of fortune hunters arriving. An already fraught situation was complicated by tension between the British and the Boers, tensions fuelled by colonialist adventurers such as the mineowner and business magnate Cecil Rhodes (1853–1902).

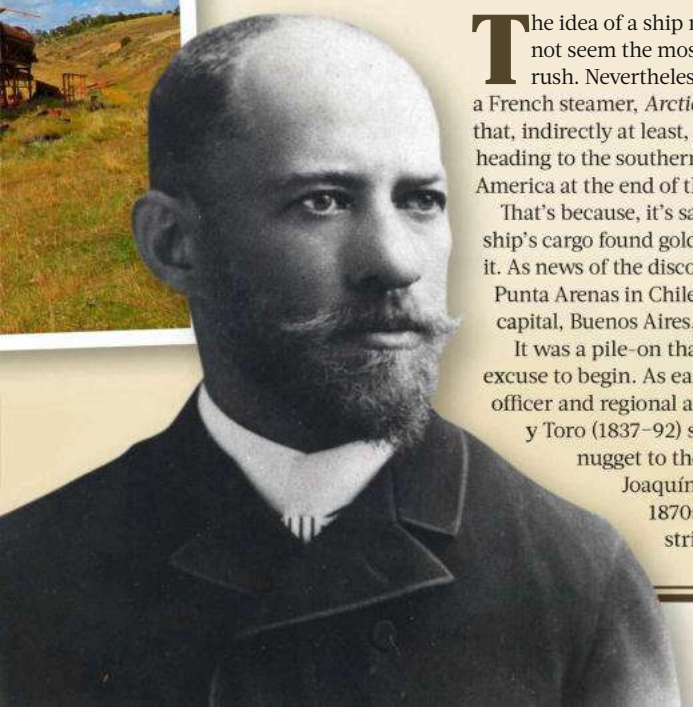
It was Rhodes, partly motivated by his loathing for South African Republic president Paul Kruger (1825–1904) and partly by resentment at Boer control of lands rich in natural reserves, who organised the so-called Jameson Raid (29 December 1895–2 January 1896). This saw British colonial administrator Leander Starr Jameson (1853–1917) lead a force of 500 men employed by Rhodes' British South Africa Company over the border from Rhodesia in a bid to spark an uprising by British expatriate workers. It failed miserably and was a personal catastrophe for Rhodes, who was replaced as prime minister of Britain's Cape Colony. The ill-feeling generated was a big factor in the outbreak of the Second Boer War (1899–1902).

The growth of Johannesburg was also the result of the gold rush, which within a decade grew from a dusty mining village, Ferreira's Camp, to become the largest settlement in southern Africa.

ABOVE: **Workers from the Witwatersrand Gold Mining Company, c1880s. The area was found to be rich in lode deposits, trapped deep underground**

RIGHT: **A newspaper illustration depicting the aftermath of the Jameson Raid, which partly stemmed from resentment over Boer control of gold reserves**

TIERRA DEL FUEGO, CHILE & ARGENTINA (1883–1906)



The idea of a ship running into trouble may not seem the most obvious catalyst for a gold rush. Nevertheless, it was the grounding of a French steamer, *Arctique* in Patagonia in 1884 that, indirectly at least, led to hordes of prospectors heading to the southernmost reaches of South America at the end of the 19th century.

That's because, it's said, a team sent to rescue the ship's cargo found gold in the sand and mud around it. As news of the discovery made its way back to Punta Arenas in Chile and then to Argentina's capital, Buenos Aires, a gold rush started.

It was a pile-on that had been waiting for an excuse to begin. As early as 1870, Chilean navy officer and regional administrator Óscar Viel y Toro (1837–92) sent a locally discovered nugget to the Chilean president, José Joaquín Pérez (1801–89). In the 1870s, several further small strikes were made in the area.

Back in the mid-1880s, the press compared the findings to those made in California and Victoria. Bucharest-born adventurer and engineer Julio Popper (1857–93) was among those who flocked to the region, and found gold dust at San Sebastián Bay in Tierra Del Fuego. The gold rush also encompassed Chilean islands south of the Beagle Channel, but the amount of metal found began to decline from the middle of the 1890s.

More widely, beyond fuelling the growth of Punta Arenas, today a port city of more than 100,000 souls, the gold rush arguably did little to improve the area's economy. And for one community in particular, it was a disaster. The Selk'nam genocide was perpetuated against indigenous people who lived a nomadic life on Isla Grande de Tierra del Fuego. Those who oversaw the systematic hunting, abduction and rape of the Selk'nam included Popper, now remembered not as a brave pioneer but as a brutal southern conquistador.

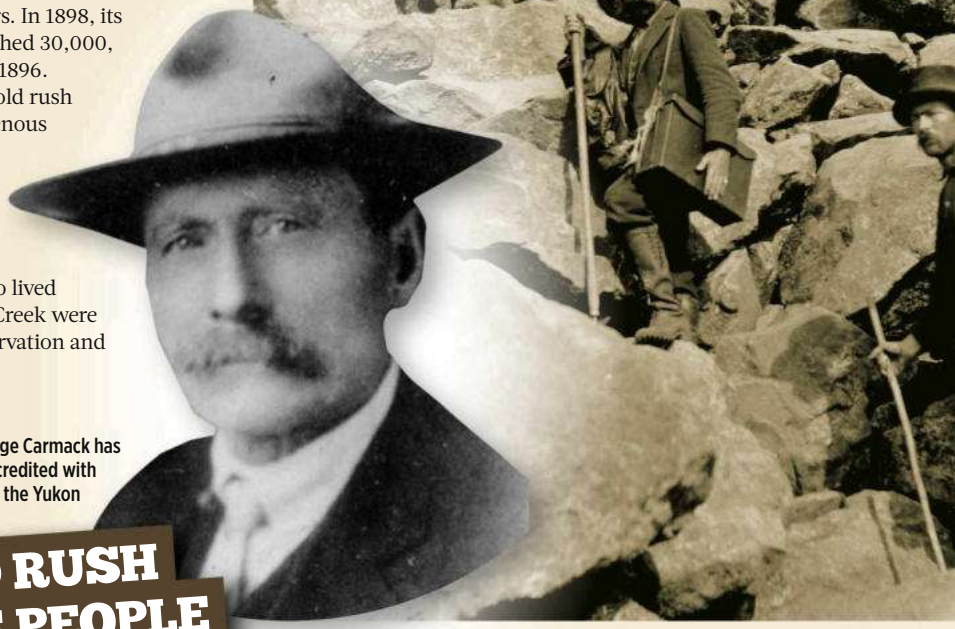
YUKON TERRITORY, CANADA (1896–99)

If you're going to have a gold rush, it should be an organised free-for-all. This at least seems to have been the attitude of the Canadian authorities when, in 1896, gold was discovered at Rabbit Creek in the Yukon by a party that included US prospector George Carmack (1860–1922), his wife Shaaw Tláa aka Kate (c1857–1920), and Kaish aka Skookum Jim (c1855–1916) of the Tagish First Nation, whose role in the find may have been downplayed at the time over fears an indigenous person's claim would not be recognised.

As news of the find spread, notably via Seattle and San Francisco when newly rich prospectors headed south on steamers, thousands went off in the opposite direction, with most travelling via the Alaskan ports of Dyea and Skagway. The Klondike gold rush was underway. But those who were ill-prepared soon hit a snag. If prospectors were to access the wilderness, the Canadian authorities decreed, they had to carry a year's supply of food to prevent starvation. In all, a typical hopeful's equipment and provisions weighed close to a tonne.

Despite this, as many as 100,000 people tried their luck, including the author Jack London, whose adventure novels *The Call of the Wild* (1903) and *White Fang* (1906) drew on his experiences. However, the difficulties involved in travel – mountains and a freezing climate added to the difficulties – meant that most didn't arrive until the summer of 1898. Few made their fortunes.

All these people needed feeding and watering, and they wanted to be entertained when they weren't working. Boomtowns sprung up, including Dawson City, which stood at the confluence of the Klondike and Yukon rivers. In 1898, its population reached 30,000, up from 500 in 1896. As so often in gold rush histories, indigenous people paid a high price for the dreams of others. In the Yukon, the Hän people who lived around Rabbit Creek were moved to a reservation and many perished.



US-born George Carmack has traditionally been credited with discovering gold in the Yukon

"AS SO OFTEN IN GOLD RUSH HISTORIES, INDIGENOUS PEOPLE PAID A HIGH PRICE FOR THE DREAMS OF OTHERS"

The Klondike gold rush saw increased traffic down the Yukon River, leading to the launch of new sternwheelers to cope with the demand

Gold dust was considered legal tender in Dawson City. Here, a man pays for goods in a local store by pouring his stash of dust onto the counter

A busy street in Dawson City. In 1898, the population was estimated to be around 30,000; today there are only around 1,300 residents

GETTY IMAGES X7, ALAMY X3

Prospectors pause for a breather near the Chilkoot Summit, on the border between the Yukon Territory and Alaska

NOME, ALASKA (1899–1909)

They were dubbed the "Three Lucky Swedes" for good reason. In September 1898, Norwegian-American Jafet Lindeberg (1874–1962), and two American Swedes, Erik Lindblom (1857–1928) and John Brynteson (1871–1959), found gold at Anvil Creek. The discovery led to the foundation of the Nome mining district and made the men's fortunes.

Over the course of the winter, news of the trio's find spread and a familiar pattern asserted itself as thousands of prospectors headed for the area. These included many who, hoping for better luck across the border, abandoned the Canadian Yukon. By the summer of 1899, Nome's population had grown to at least 10,000 people. A tent city eventually spread for tens of miles along the coast of the Bering Sea.

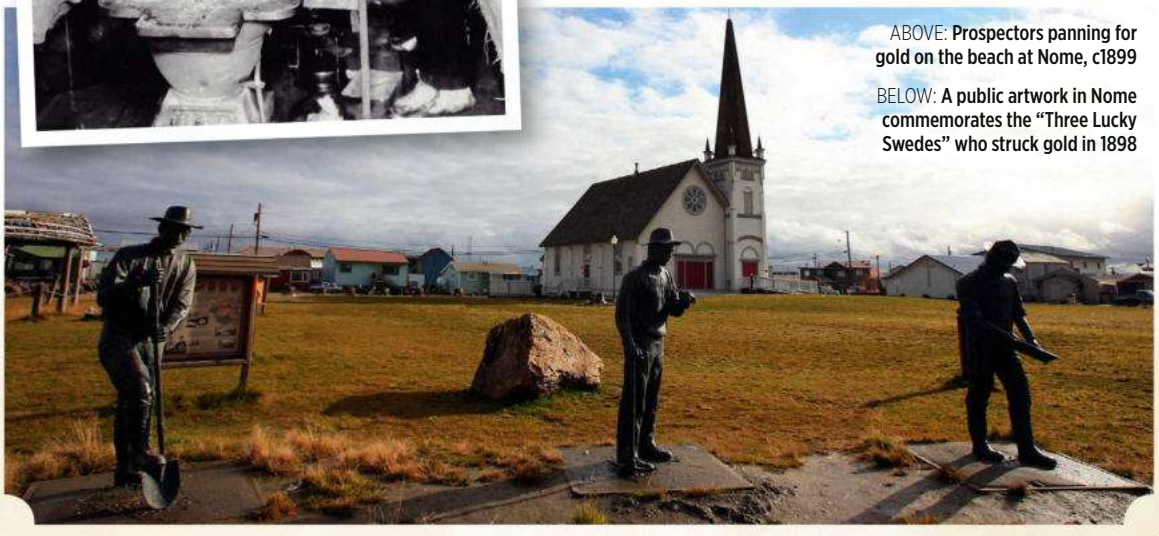
In part, this was because a notable feature of the Nome gold rush was that much of the metal was found in beach sands on the coast, and initially recovered using panning. Later on, as gold became increasingly more difficult to find, larger companies with the capital to invest in machinery took over sifting the sands.

Those trying their luck had to contend with Alaska's brutal climate. Because of ice, the beaches could only be worked in the summer and the local police were charged with shooing off those who didn't have adequate shelter as winter began to bite. As for prospectors working at local creeks, they had to battle the permafrost and some even heated the ground with steam to make it workable.

Despite a distinct lack of harbour facilities, Nome City boomed and the town's population briefly included Wyatt Earp (1848–1929) of OK Corral fame, who became the co-owner of the Dexter Saloon (and, it has to be added, brothel). It's a time in Wyatt's life briefly touched upon in the 1994 biopic starring Kevin Costner, although Nome was more fully immortalised on screen in *The Spoilers* (1942), starring Marlene Dietrich, Randolph Scott and John Wayne.

WORDS: JONATHAN WRIGHT

A prospector weighs out his friend's share of gold dust in their cabin in Nome, c1900

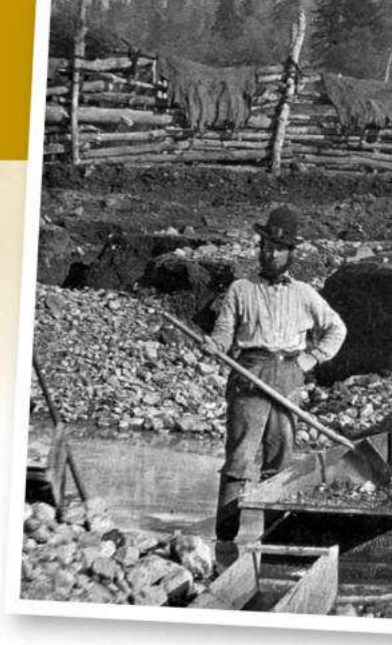


ABOVE: **Prospectors panning for gold on the beach at Nome, c1899**

BELOW: **A public artwork in Nome commemorates the "Three Lucky Swedes" who struck gold in 1898**

ALL THAT GLITTERS

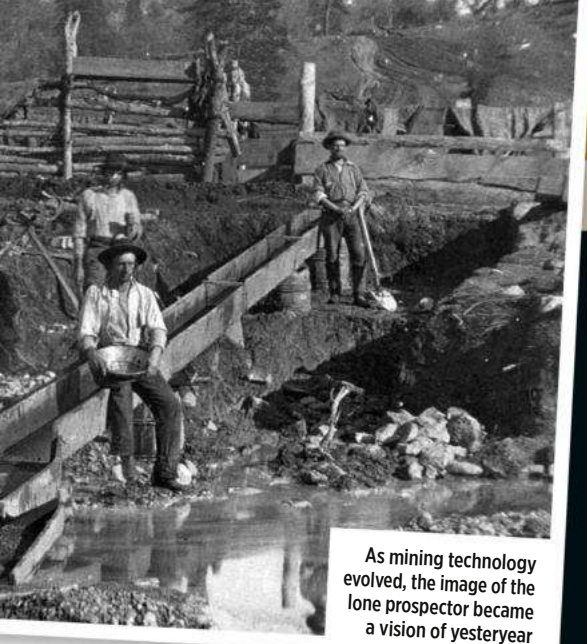
We examine some of the mining methods used by prospectors during the California gold rush



When James Marshall discovered gold by the American River in early 1848, it sparked an outbreak of gold fever that would last for decades. Thousands of people from all over the globe flocked to the area in the hope of striking it rich, bringing with them a range of mining techniques and experience. The first miners relied on 'panning' methods, swirling the river water in a pan so that the heavier metals sank to the bottom while lighter sediments washed to the back, but before long, simple machines like 'rockers' were also introduced, capable of processing larger volumes of gravel and water.

Although these rudimentary methods remained in use, more intensive techniques would emerge during the 1850s, such as hydraulic mining, which used jets of water to wash gold-bearing deposits from riverbanks into sluices, and building bypass canals, which gave miners access to gold in riverbeds.

ARRASTRA
Mules could be used to power basic mills known as arrastras, capable of crushing ore to release the precious metals within.
CHANNELLED RIVER
RIVER
ENCAMPMENT
Basic living quarters, often in rag-tag constructions made from wood and canvas, meant that fires were common, and saw many perish in freezing winter conditions.
PAN
Usually made of sheet iron and around 12 inches in diameter, the pan was partly filled with dirt and held under water. Swirling motions would help separate the dirt from the gold contained within it, which would be left at the bottom of the pan.
LONG TOM
One alternative to using pans was to place the dirt in a device called a long tom, into which water would also be poured. Holes in a sheet of iron beneath the dirt would allow the muddy water to be washed away, leaving behind nuggets of gold. Riffles (barriers) at the bottom would also catch the fine gold that passed through the holes.



As mining technology evolved, the image of the lone prospector became a vision of yesteryear

KEY NUMBERS

$3

The price that prospectors in some mining camps could expect to pay for a single egg, as merchants cashed in on the thousands of people flocking to the area to seek their fortunes

13

The number of prospectors who died trying to cross Death Valley to reach the goldfields in 1849

300,000

The estimated number of gold rushers who had arrived at the California goldfields by 1854

$36,000

The amount allegedly made by businessman Samuel Brannan in just nine weeks by selling picks, pans and shovels to prospectors heading to the goldfields

21

The amount, in tonnes, of gold coins and nuggets (belonging to prospectors of the California gold rush) on board SS *Central America* when it sank off the coast of South Carolina in 1857

$200m

The value of gold dug out of the Sierra Nevada mountains in California between 1849 and 1852 – equivalent to around $5.5bn today

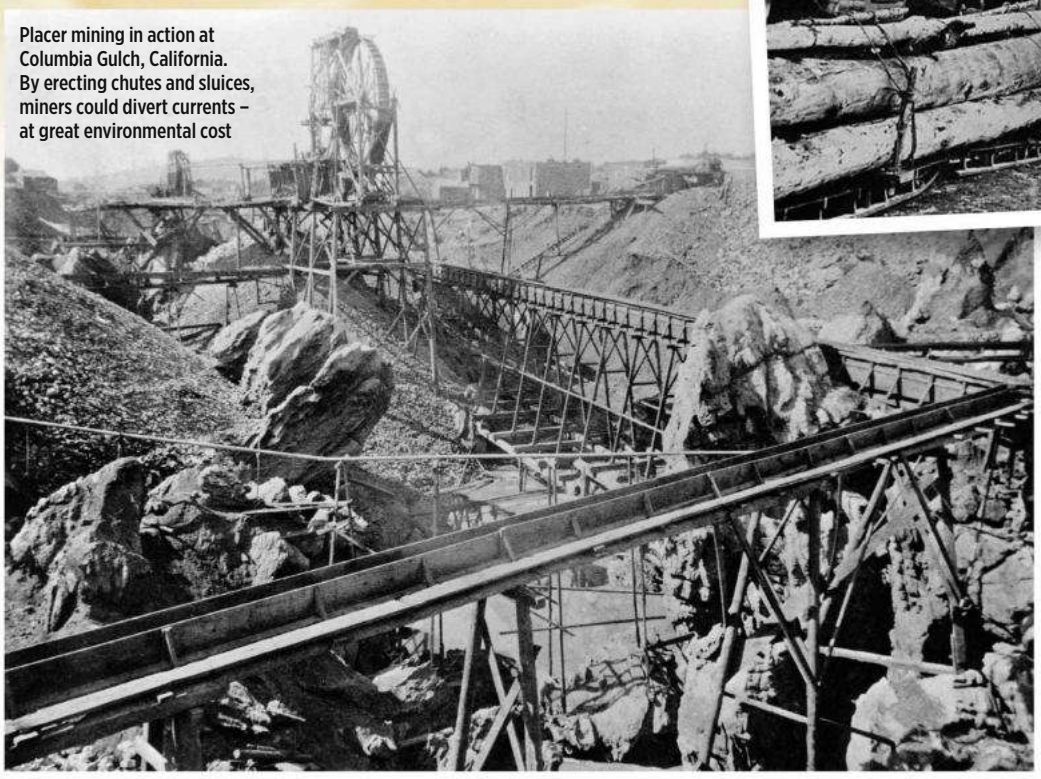
MANUAL LABOUR
Resources and tools were scarce and expensive, so many jobs in the goldfields – at least during the early years of the California gold rush – were done by hand.

SLUICE BOX
Water could also be channelled through canals, where riffles (barriers) along the bottom of devices known as sluice boxes would catch the gold and let other materials pass through – as seen in the circled image.

EXPOSED RIVERBED
Diverting rivers enabled prospectors to gain easier access to black sands, where heavier gold was deposited from upstream by spring meltwaters. The practice also gave gold-hunters the ability to regulate the flow of the water.

RETURNED WATER
Once the water had been used to search for gold, it was channelled back into the river from which it came.

SOL90 IMAGES X1, GETTY IMAGES X2, ALAMY X1



Placer mining in action at Columbia Gulch, California. By erecting chutes and sluices, miners could divert currents – at great environmental cost

TOP: **A dogsled team hauls lumber destined for the mining industry in the city of Dawson, Yukon**

BOTTOM: **Lode miners seen hard at work below ground in Kalgoorlie, Western Australia**

THE PRICE OF GOLD

Dr Stephen Tuffnell shines a light on the staggering cost that intensive mining practices inflicted upon the natural world

Gold mining is the work of dismantling the landscape. And it came with colossal costs to the environment. "Nothing but flood and fire is so ruthless as the miner," wrote one miner from Yukon's Bonanza Creek in 1898.

Mining birthed a host of industries with a voracious appetite for the earth's natural resources. From city-building and commercial agriculture to logging and hunting, from iron working to steam transportation, gold rush societies deforested their local areas, decimated animal populations, and quite literally turned the earth inside out. But the transition to industrial mining accelerated the pace of that destruction to an unprecedented degree.

DIMINISHING RETURNS

Ironically, geology determined the environmental toll. Whether via placer mining (in which the rock surrounding the gold has eroded) or lode mining (in which the gold is encased in solid rock), miners and engineers devised novel methods for recovering gold that consumed significant quantities of natural resources.

Most rushers sought placer gold in the form of fine flakes (and occasionally nuggets) deposited in streams and riverbeds. Their preferred tools may have been picks, pans and shovels, but they left nothing to chance. They worked hard to regularise the unpredictable environment. Using tonnes of lumber, teams of miners dammed creeks and streams, diverted currents with chutes and sluices, and placed unbearable pressure on local ecosystems. And it was hard work. After just two years at the mines in California, one miner reflected that "this country wears a man out very fast."

But, after a remarkably short time, the accessible placer gold was itself exhausted. As the nuggets became fewer and smaller, more costly technologies were devised to extract the fine gold in profitable quantities. Soon, the picks and pans of the prospector gave way to the machines of industrial mining. In California, this transition had already occurred by 1853, just five years after the rush began.

MINING UNDER PRESSURE

If you've ever held your thumb over the end of a hose pipe to increase the pressure of the jet, you understand the technology of hydraulic mining. Under the same principle, miners fired high-powered jets of water at mountainsides and riverbanks to wash gold-bearing deposits into sluices. Though simple, the technology was so effective that it spread rapidly around the world and was soon utilised in Canada, Australia, New Zealand and the Arctic.

Hydraulic mining was a massive, resource-intensive undertaking. Some hydraulic systems used as much as 800,000 gallons of water per day, fired from hoses at speeds of 100mph. Forests were cleared to make the flumes through which the gold bearing gravels were transported. According to the California State Agricultural Society,

GETTY IMAGES X5, ALAMY X2

LEFT: **Another image from Columbia Gulch shows reservoirs used for mining placer gold**

RIGHT: **A view of the Yuba River, California. In 1878, debris was piled so high in parts of the river that water covered the tops of pine trees along its banks**

by 1870, one-third of the timber in the state was already gone – almost all that deforestation occurred in the sugar pine forests of the Sierra gold country. Large reservoirs and 6,000 miles of ditches were constructed to supply water to the hoses that washed out thousands of acres of valleys.

What was left behind was more moonscape than landscape. As one observer described it in 1868: "by no other means does man so completely change the face of nature than by this process... Hills melt away and disappear under its influence... The desolation that remains after the ground, thus washed, is abandoned, is remediless and appalling." Observing the same destruction in Australia, one writer found the landscape "irredeemably hideous". Although these people wrote of the cosmetic transformation they witnessed, they had intuited that the price of untold mineral wealth had been paid by nature.

Thousands of tonnes of debris travelled through the sluices and was deposited downriver. In the valleys of the Bear, Yuba and American rivers, that debris was piled so high in the riverbed that the tops of pine trees on the banks were submerged. By 1878, on stretches of the Bear River in California, the river's bed was higher than the surrounding landscape and held in place only by artificial levees. Elsewhere, levees burst, and an estimated 40,000 acres of farmland were flooded with a stew of mud, sand and gravel known as "slickens".

Slickens were laced with toxic mercury used to trap gold in the sluices. Most hydraulic mines used about 20 tonnes of mercury per mile of sluices. To sustain this, by 1870 California mined one-third of the world's mercury, about 2 million pounds a year.

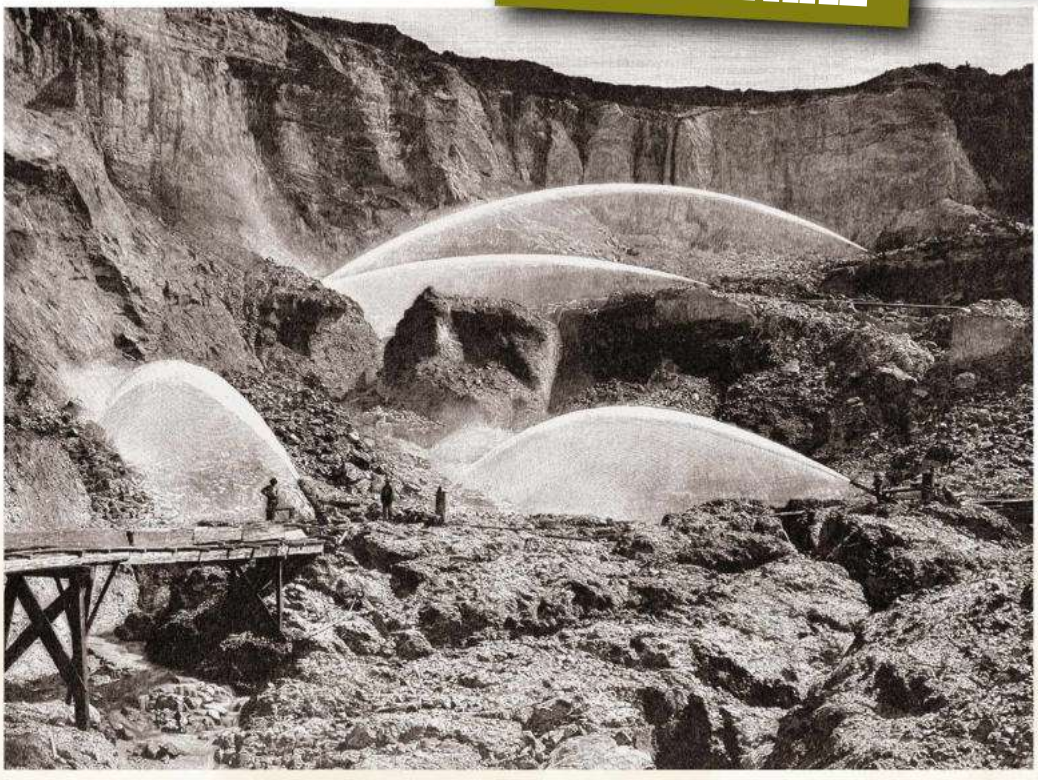
"THE ODOURLESS, COLOURLESS VAPOURS ESCAPING THE FURNACE WERE LETHAL"

It was a toxic industry. Above ground, workers roasted the mercuric sulphide ore (cinnabar) to extract elemental mercury – the odourless, colourless vapours escaping the furnace were lethal. According to one visitor in 1863, at New Almaden, the state's largest quicksilver mine, vapour from the furnace had denuded the mountainside of trees. Workers were described as "cadaverous". As mercury washed into waterways it was converted into methyl mercury and entered the food chain, concentrating, in amounts deadly to fish and humans, through biomagnification.

Early conservation movements sprang from the impacts. But this wasn't environmentalism as we know it today. For opponents of industrial mining the key question was not how to restore destroyed environments, but how to preserve them for future exploitation.

A WORLD TRANSFORMED

Gold miners often conceived of their work as an elemental struggle between man and nature. Through that struggle, they hoped to transform gold's value into all kinds of other valuable things: food, homes, businesses, and more wealth. They left behind an earth unrecognisably transformed by the industrial processes of realising those promises; the value of the earth itself was merely instrumental in their pursuit.



Miners used jets of water to wash gold-bearing deposits from mountainsides – as seen here in North Bloomfield, California

DR STEPHEN TUFFNELL is associate professor of modern US history at St Peter's College, University of Oxford, and the author of *Made in Britain: Nation and Emigration in Nineteenth-Century America* (University of California Press, 2020)

DR STEPHEN TUFFNELL ON STUDYING GOLD RUSHES TODAY

Between the clash of pick and pan was the furious scribble of pen on paper

We live in a world of gold. From the smartphones in our hands to the James Webb Space Telescope, it underpins our connected world. In fact, gold is so central to modern human endeavour that one third of all the gold ever mined has been taken from the ground since 1950.

Gold rushes have entered the popular imagination in a way that most historical phenomena have not. The bearded, heroic miner is an emblem of national character around the world. "If the Gates of Hell were hinged with gold," one Scottish rusher wrote in 1857, "a Yankee would go there and take them."

But through careful research, focus has recently shifted from tales of national progress to the vibrancy, diversity and mobility of gold rush societies. Popular national myths are giving way to an appreciation of them as an interconnected phenomenon taking historians, not quite to the Gates of Hell, but to all parts of the globe.

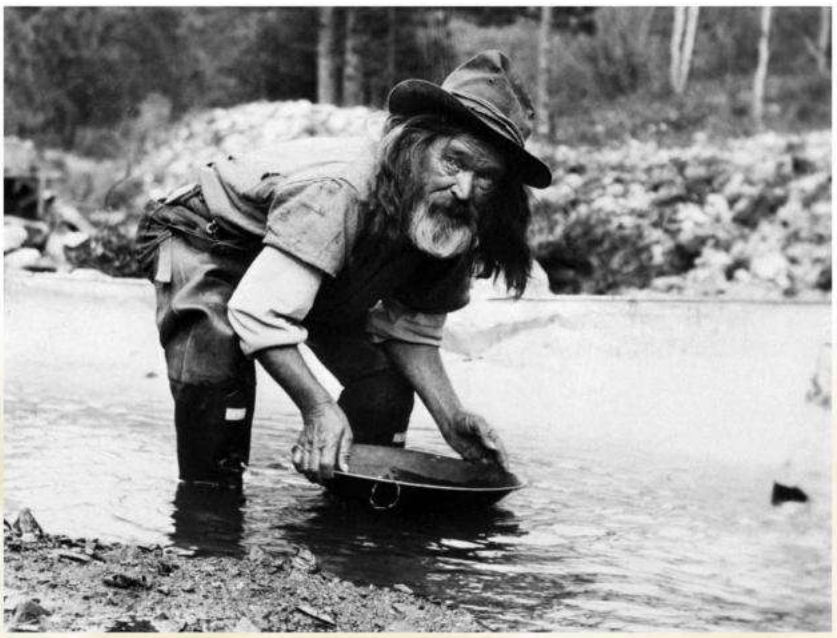
The earth-moving gold rushes that struck between 1848 and 1898 were profoundly unsettling events: they redirected patterns of global migration, birthed new cities and expanded the reach of settler empires. They were also profoundly destructive of indigenous polities, and many of the world's "wild places" are in fact gold rush landscapes, violently transformed by industrial excavation. These were the hallmarks, not only of gold, but of the wave of imperial globalisation that simultaneously broke upon the world in that extraordinary 50-year period.

Curiously, in the fevered culture of rushing, the gold itself can seem relatively unimportant. Recent research shows that these were cultural events as much as economic and technological ones. Between the clash of pick and pan was the furious scribble of pen on paper. To immerse oneself in the outpouring of artworks inspired by the rushes is to see vividly the anxieties and utopianism with which contemporaries viewed their upheavals. Satirists mocked imaginary treasure-seekers flying to the diggings using jet packs. Safely ensconced in their parlours, readers pored over salacious tales of fallen women and bawdy, violent men. Anxious observers fancied that those struck with gold fever might even devour the earth itself in their endless pursuit of the precious metal.

These responses tell us a great deal about the dual nature of gold rushes. For some they promised great wealth and liberation, for others, they brought far greater perils of uncontrolled passions and dispossession.

We must continue to grapple with that duality. As the world transitions to a low carbon economy, the demand for gold and rare earth metals will rise – and with it pressures on the environments and communities where they are found. Examining anew the dramatic transformations set in motion by the rushes may help us navigate this momentous shift.

DR STEPHEN TUFFNELL is associate professor of modern US history at St Peter's College, University of Oxford. He is the author of *Made in Britain: Nation and Emigration in Nineteenth-Century America* (University of California Press, 2020) and co-editor of *A Global History of Gold Rushes* (University of California Press, 2018) with Dr Benjamin Mountford



"The bearded, heroic miner is an emblem of national character around the world," says Dr Stephen Tuffnell

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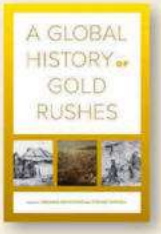
GET HOOKED

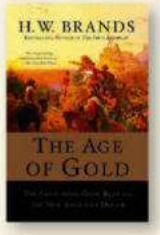
If we've whetted your appetite for the gold rush era, why not explore the topic further with our pick of books, podcasts and TV programmes?

BOOKS



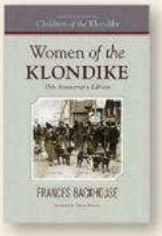
A Global History of Gold Rushes
Edited by Dr Benjamin Mountford and Dr Stephen Tuffnell (University of California Press, 2018)

Historians of the US, Africa, Australasia and the Pacific World tell the story of the 19th-century gold rushes from a global perspective – from their impact on migration, to the ways in which they affected the environment.



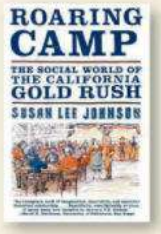
The Age of Gold: The California Gold Rush and the New American Dream
By Professor HW Brands (Doubleday, 2002)

Brands tells the story of the California gold rush through multiple perspectives – from adventurers John and Jessie Fremont to entrepreneur Leland Stanford.



Women of the Klondike
By Frances Backhouse (Whitecap Books, revised 2010)

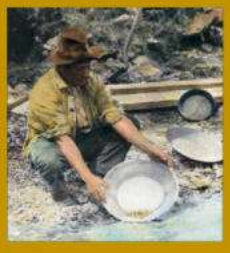
Backhouse brings to life the stories of the diverse women – entrepreneurs, nuns, doctors, nurses, journalists, dancehall entertainers and more – who, for a multitude of reasons, became swept up in the rush for gold in the Klondike region of the Yukon.



Roaring Camp: The Social World of the California Gold Rush
By Prof Susan Lee Johnson (WW Norton & Company, 2000)

From the mines where the men worked, to the all-male households in which they lived, Johnson explores the dynamic social world created by the California gold rush.

ON THE BBC

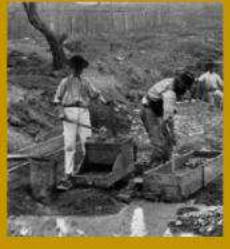


BBC RADIO 4

▶ In Our Time: The California Gold Rush
bbc.co.uk/programmes/b05nxgdd
Melvyn Bragg and guests discuss the California gold rush of the mid-19th century, when a chance discovery of gold in the American River led to seismic demographic and economic changes.

BBC SOUNDS

▶ The Call of the Wild by Jack London
bbc.co.uk/sounds/series/p07snlvs
Actor Joseph Ayre reads Jack London's classic 1903 novel, which tells the story of one dog's survival during the Klondike gold rush.



BBC WORLD SERVICE

▶ Witness History: The West Australian Gold Rush
bbc.co.uk/programmes/p047k2tl
Claire Bowes presents an archive interview with Frank Gerald, recorded in 1937, who witnessed the discovery of gold in Coolgardie as a young man.

ONLINE AND AUDIO

▶ For podcasts, features, quizzes, interviews and more on the gold rush era, visit our website: *historyextra.com*

▶ Gold rushes: everything you wanted to know
Dr Stephen Tuffnell answers listener questions on the gold rushes that captivated the imaginations of prospectors in the 19th century. Listen at *bit.ly/3SFBhjz*

▶ Digging into the Klondike gold rush
Delve into the history of the Klondike gold rush, a whirlwind of mining activity that brought more than 30,000 prospectors to Yukon Territory. Listen at *bit.ly/3EkEkt8*

▶ Anti-Chinese prejudice: from gold rushes to exclusion laws
Prof Mae Ngai reveals how 19th-century gold rushes helped shape racist attitudes towards Chinese people living in the west. Listen at *bit.ly/3McI02a*

WATCH

The Luminaries
(streaming on Netflix)

Murder, love, intrigue and twists of fate beset two astrally connected settlers at the height of New Zealand's 1860s gold rush in this drama based on Eleanor Catton's 2013 novel.

Operation Gold Rush
(streaming on Apple TV+)

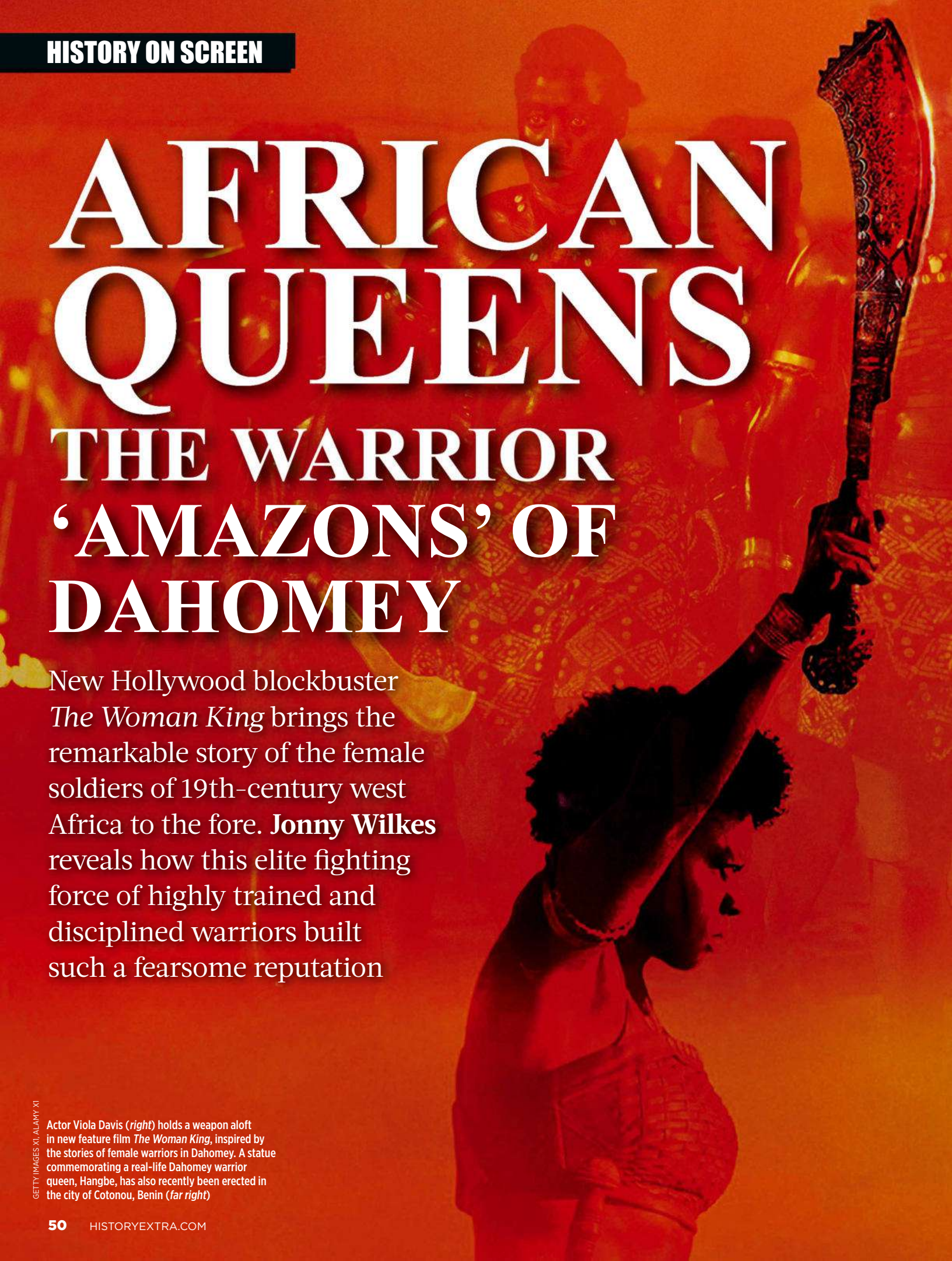
Historian and broadcaster Dan Snow leads a team of adventurers on an epic journey across the Canadian wilderness, following in the footsteps of the 19th-century Klondike gold rush.

GETTY IMAGES X4, ALAMY X1

AFRICAN QUEENS

THE WARRIOR 'AMAZONS' OF DAHOMEY

New Hollywood blockbuster *The Woman King* brings the remarkable story of the female soldiers of 19th-century west Africa to the fore. **Jonny Wilkes** reveals how this elite fighting force of highly trained and disciplined warriors built such a fearsome reputation



GETTY IMAGES X1, ALAMY X1

Actor Viola Davis (*right*) holds a weapon aloft in new feature film *The Woman King*, inspired by the stories of female warriors in Dahomey. A statue commemorating a real-life Dahomey warrior queen, Hangbe, has also recently been erected in the city of Cotonou, Benin (*far right*)

MAIN: A c1890 image shows a group of 'Amazons' with an unknown male sitter. The women were known by names such as the 'Agojie' by the Dahomeans themselves

RIGHT: *The Woman King* stars Viola Davis as a fictional Agojie general named Nanisca – possibly a nod to a real warrior who bore the same name

Agojie fighter Seh-Dong-Hong-Beh depicted with the head of an adversary. In 1851, the commander led a failed raid on the Egba fortress of Abeokuta

The assault on Abeokuta was going to fail. The soldiers of Dahomey, a powerful kingdom in west Africa, were trained, disciplined and courageous, so threw themselves across the deep ditches and up the high walls without hesitation – only to be cut down by the gun placements and numerous defenders waiting at the top. The city, capital of Dahomey's rivals the Egbas, was too big and too well fortified. Much as it had been 13 years earlier at the first attempted siege, defeat was a matter of time on that day in 1864.

If this was to be their doom, however, one Dahomey soldier would meet it on their own terms with a gesture of contemptuous defiance. Having scaled the wall, they stopped on the ramparts in a spot the defenders could not reach, sat down facing away from the enemy, and began smoking a pipe.

Such fearlessness came as no surprise to the Egbas, for the soldier belonged to a regiment especially revered among their enemies and the Europeans who made the journey to west Africa. It was made up entirely of women, relentlessly trained and furious in battle, the likes of which could not be found anywhere else in the world. The Europeans dubbed them the 'Amazons', and it was a French doctor and historian, Edouard Dunglas, who recorded the deeds of the pipe-smoking warrior.

Her defiance lasted only so long, but her actions served to illustrate the ultimate fate of the Dahomey Amazons. For all their bravery and skill, this female fighting force would be undone before the end of the 19th century by the same thing that befell many indigenous populations around the world: superior firepower. At Abeokuta, the defenders simply sent for a sharpshooter. "Taking his time," wrote Dunglas, "he aimed carefully and slew the warrioress with his first shot".

ALL THE KING'S WOMEN

Most of the stories about the Dahomey Amazons come from the writings and observations of Europeans – Dahomey itself (now part of modern-day Benin) had an oral tradition – so their legacy can only be glimpsed. Even the name 'Amazons' was not their own, but the choice of those Europeans having been inspired by the warrior women of ancient Greek mythology. More appropriate names would be the Mino or Minon (meaning 'our mothers'), Ahosi ('king's wives'), or the Agojie.

Yet their reputation is stronger than ever, being the inspiration for the Dora Milaje, the all-female bodyguard in the 2018 superhero blockbuster *Black Panther*, and the subject of a new movie, *The Woman King* (2022). And while the latter, starring Viola Davis as an Agojie

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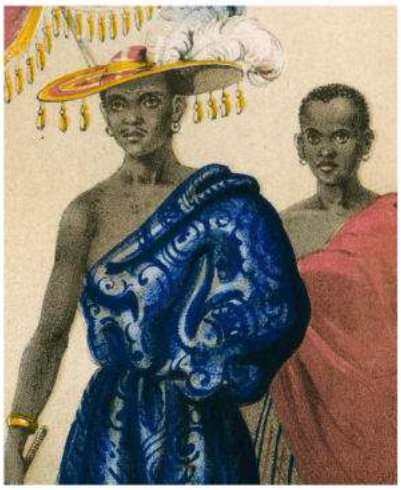
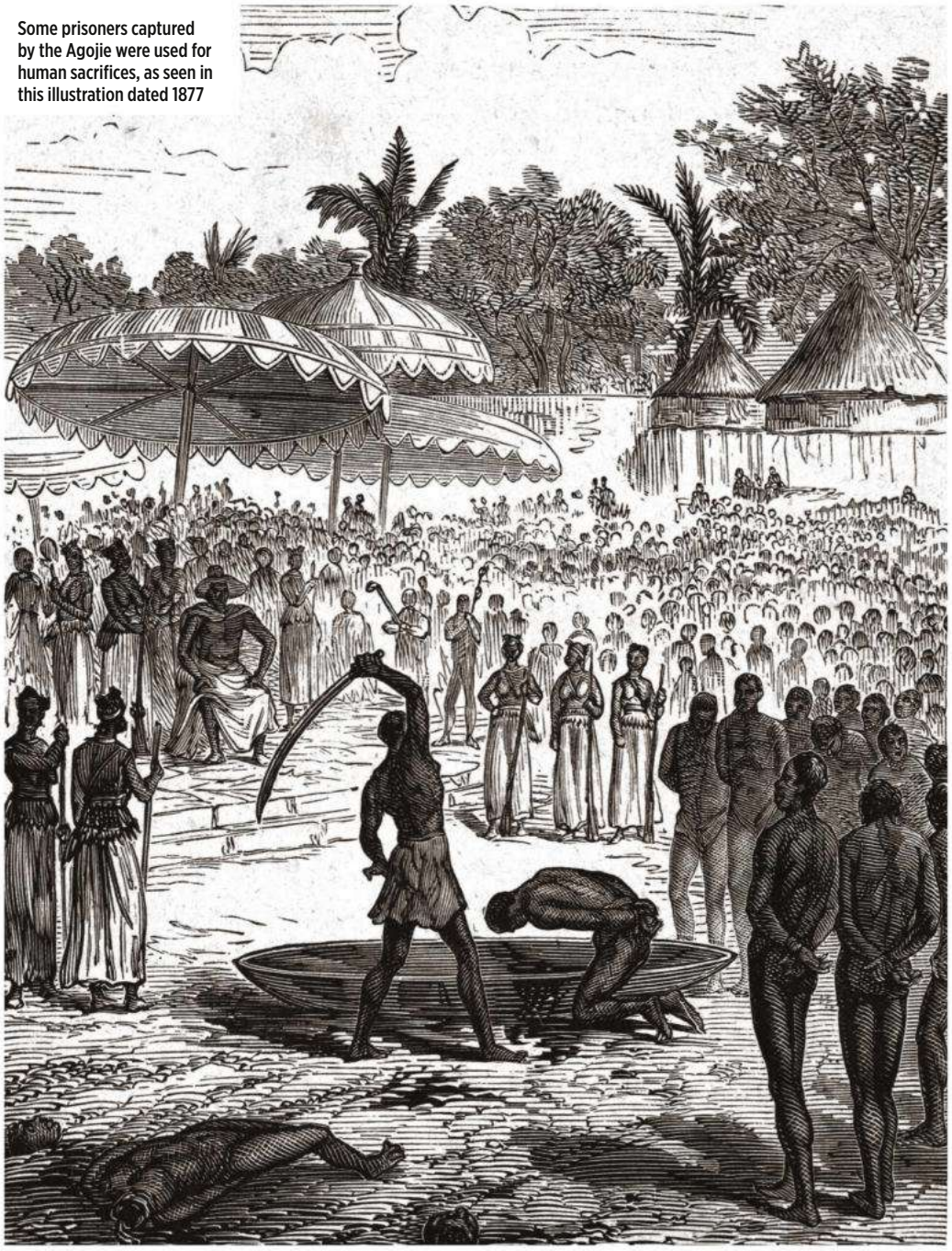


King Gezo (*left*), who took the throne of Dahomey in 1818, turned the Agojie into a feared fighting force



Some prisoners captured by the Agojie were used for human sacrifices, as seen in this illustration dated 1877

general, takes significant liberties with the real history, it represents just how well-trained and fearsome they really were.

Under King Gezo, who came to the throne in 1818, the Agojie went from a small, ceremonial guard to a fully integrated regiment. Dahomey was already a militaristic kingdom with, unusually for the region, its own standing army, but he implemented a series of reforms that saw the number of female warriors swell to as many as 6,000 by the 1840s. They were divided into several ranks: huntresses, riflewomen, archers, gunners and the particularly ferocious 'reapers'.

REAPING AND RAIDING

The Agojie wore striped uniforms of blue and white or rust-coloured tunics, and carried with them a host of ornaments and charms on their belts. They were armed with clubs, knives, spears and a selection of firearms bought from European traders, including flintlock muskets, carbines and blunderbusses, although their most-feared weapon was a three-foot-long machete-like blade. This was so sharp that when wielded two-handed by a reaper it could cut a man in half with a single swing, making it the ideal weapon for the Agojie when at war with rival kingdoms as they collected the heads of fallen enemies.

Away from war, the other chief duty was to raid neighbouring villages with the intention of capturing prisoners (with their heads intact) to sell into slavery. Dahomey grew wealthy and powerful as a major player in the transatlantic slave trade, by controlling ports and providing 'goods' to European slavers. It was one of many African kingdoms benefitting from the trade; Gezo actually took the throne in a coup with the assistance of a Brazilian slave trader, Francisco Félix de Sousa.

Raids were an effective method of supplying the demand for slaves, the majority of whom went to the ports to sail across the Atlantic while a proportion stayed in Dahomey to work on farms and plantations, or at the palace and in the army. Others were used for human sacrifices at major ceremonies. And while some in Dahomey, members of the Agojie among them, tried to shift the economy to palm oil production, the kingdom fought to keep its role in the slave trade, even after Britain began blockading the west African coast in the wake of its own abolition in 1834.

"New recruits became inured to killing by being made to throw prisoners off a high platform"

Insensitivity to the suffering of others was crucial to Agojie training. New recruits became inured to killing by being made to throw prisoners off a high platform or carrying out executions. In 1889, French naval officer Jean Bayol witnessed a ceremony involving a girl named Nanisca "who had not yet killed anyone". She "walked jauntily" up to a prisoner, with their hands and feet bound, and "swung her sword three times with both hands, then calmly cut the last flesh that attached the head to the trunk." Bayol then adds the gruesome ▶

Wielding clubs, knives, spears and even firearms acquired from European traders, the Agojie were described by one Frenchman as "an army of demons, spewed up by a volcano"

"The Agojie prided themselves as being regarded not as female warriors, but as men"

◀ detail, possibly an embellishment to make Dahomey appear more savage: "She then squeezed the blood off her weapon and swallowed it."

PUTTING UP WITH PAIN

Agojie recruits could be adult women, either volunteers or those captured during raids, but often young girls, sometimes as young as eight. They may have been handed over to the king by their father if deemed too troublesome or rebellious. Before Gezo's reforms, it was possible they were made up from the king's wives, of which he could have hundreds if not thousands, but the origins of the Agojie are not certain.

Theories suggest that either King Houegbadja (reigned c1645–85) created the gbeto, a band of women to serve as elephant hunters, or that his daughter Hangbe instituted a female bodyguard during her short reign. During the 19th century, the loss of so many men to countless wars and the slave trade may have forced Gezo to look to women to bolster the Dahomey army. The Agojie, however, quickly became an asset. They trained in hand-to-hand combat, survival (being sent into the wild with no food or weapons), and tolerance of pain.

In 1861, an Italian priest named Francesco Borghero observed one of Dahomey's regular mock battles to show readiness for war, where 3,000 Agojie stormed through a long wall of thorny acacia branches, showing no pain, and 'attacking' a group of huts. As a prize, the king presented the bravest with acacia belts to wear around their waists.

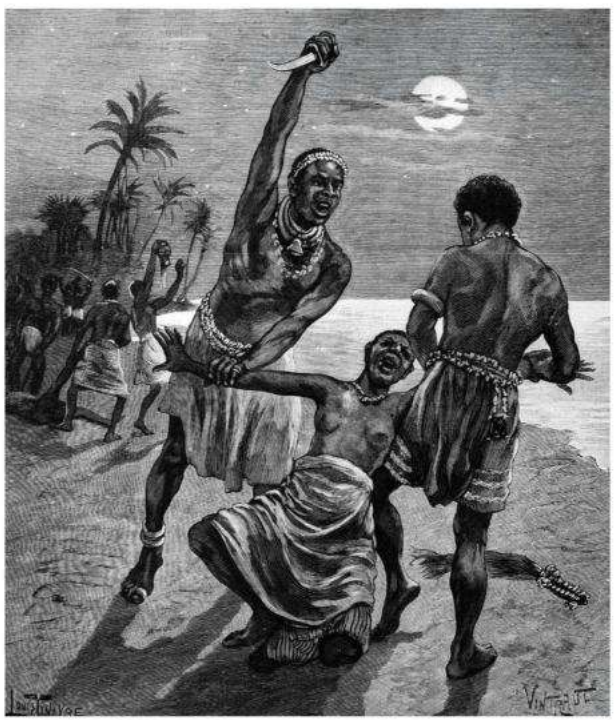
A Frenchman, Albert Vallon, witnessed another mock battle, in which he found the women "more impassioned than the men", likening them to "an army of demons spewed up by a volcano... nothing in these intrepid creatures recalled the most beautiful and most timid half of the human species". That was, in some respects, the goal of Agojie training: they prided themselves as being regarded not as female warriors, but men. "As the blacksmith takes an iron bar and by fire changes its fashion, so we have changed our nature," was a quote attributed to an Agojie general. "We are no longer women, we are men."

That said, their womanhood was an important part of their status in Dahomey society. Other than the king and his eunuchs, only women were permitted beyond the walls of the royal compound at the capital of Abomey. They were all formally married to the king, an honour in name only except that they were expected to remain celibate. In return, they were supplied with food, alcohol, tobacco and slaves (up to 50 each, according to the English traveller Sir Richard Burton). As well as military training, they practiced dancing, singing and music, all deemed important skills for an Agojie.

FRENCH FIREPOWER

When out of the palace grounds, a girl walked ahead of them ringing a bell, warning everyone to get out of the way and look in another direction. It was forbidden to touch them. This display of reverence and power, as well as the degree of independence they enjoyed, would certainly have attracted some Dahomey women to volunteer. The Agojie even wielded political power since their generals could sit on the king's council and be an active part in debating policy.

The price they had to pay for their lives of greater privilege than other Dahomey women was to fight, and often die, in the service of the king, and they did so willingly. Dahomey was frequently at war with neighbours like the Yoruba, whose most powerful state was the Oyo empire that had subjugated Dahomey in the mid-18th century and taken tribute ever since. In 1823, Gezo's armies finally defeated the



A modern illustration shows an Agojie fighter being attacked by a pair of male warriors. The women were trained to tolerate pain and be prepared to die for their king in battle

ALAMY X5, GETTY IMAGES X3

LEFT: **The battle of Atchoukpa, fought against the French in April 1890, ended in a crushing defeat for the Dahomeans**

BELOW: **A painting shows Dahomean troops succumbing to a French gunboat attack. By the end of the 19th century, the kingdom was under France's full control**

Oyo, with the Agojie right in the middle of the fighting. Not every war went their way, though: the attacks on Abeokuta in 1851 and 1864 ended in disaster. And with each battle, Agojie numbers dwindled.

The end came amidst the 'Scramble for Africa' in the late 19th century, when European powers carved up and took control of most of the continent. This brought Dahomey and France to war. In 1890, King Béhanzin's armies, including the Agojie, fought at the port of Cotonou. Despite their ferocity at hand-to-hand combat – including when Nanisca, the girl who reportedly drank blood from her blade, decapitated a gunner – the Agojie were decimated by French firepower. The war concluded with another crushing defeat at the battle of Atchoukpa.

PRODIGIOUS BRAVERY

Only two years later, the Second Franco-Dahomean War broke out as France looked to complete their conquest. While the Agojie fought in nearly two dozen battles over seven weeks, the result was much the same: superior weaponry repulsed wave after wave of attack, slaughtering Dahomey's feared female warriors in huge numbers. By the time France emerged victorious, with Dahomey becoming a protectorate, one estimate stated that only approximately 50 Agojie remained.

Much like the lone soldier smoking her pipe on the ramparts of Abeokuta, the bravery of the Agojie never left them – even in the face of defeat. A French foreign legionnaire named Bern described them in battle: "warrioresses [who] fight with extreme valour, always ahead of the other troops." Henri Morienval, a French marine, described them as "remarkable for their courage and their ferocity" as they "flung themselves on our bayonets with prodigious bravery".

The Woman King does not go as far as the Franco-Dahomean Wars – ending instead with the victory over the Oyo empire in 1823 – but it does honour the final stands of the Agojie in one its main characters, Nawi. That was the name of the woman who claimed to be the last-living survivor from the 1890s fighting with the French, who died, aged well over 100, in 1979.

GET HOOKED

WATCH

The Woman King, starring Viola Davis, Thuso Mbedu, Lashana Lynch and John Boyega, is in UK cinemas now

MORE WARRIOR WOMEN

Meet six other female fighters from history who flipped gender norms upside down and bravely went into battle...

NAKANO TAKEKO

One of the few onna-bugeisha (essentially, a female samurai, similar to the woman pictured left), Nakano Takeko excelled in martial arts and, in the Boshin War (1868–69), led a female-only group of fighters later known as the Aizu Joshitai. When shot during a daring charge at the battle of Aizu, Takeko's dying command was for her sister to cut off her head so that it would not become a trophy for the enemy.

ARTEMISIA I

Although a queen of the Greek city-state of Halicarnassus, Artemisia joined Xerxes I in his invasion of 480 BC and was revered among the Greeks as an intelligent and ruthless strategist for commanding five ships at the battle of Salamis. She was also a survivor: when defeat was inevitable, Artemisia made her escape by ramming a Persian ship and so convincing the Greeks she was on their side.

FU HAO

Fu Hao was one of the 60 or so wives of the Chinese emperor Wu Ding of the Shang dynasty, who spurned tradition by serving as a high priestess and a military general. According to the scant mentions found about her, she commanded up to 13,000 soldiers before dying c1200 BC. Her tomb was discovered in 1976, containing more than 100 weapons.

MAI BHAGO

In 1705, Mai Bhago, also known as Mata Bhag Kaur, led 40 Sikh warriors at the battle of Mukstar in Punjab, northern India, against the Mughal empire. The previous year, they had deserted, but she shamed them and, dressed in a man's uniform, inspired them to go back to battle and fight under her banner.

LOZEN

A medicine woman and warrior, Lozen fought alongside her brother, the Apache chief Victorio, and the great leader Geronimo against American forces and settlers. It was said that she had almost supernatural abilities to anticipate the enemy's movements. She was referred to as "a shield to her people".

ANA NZINGA

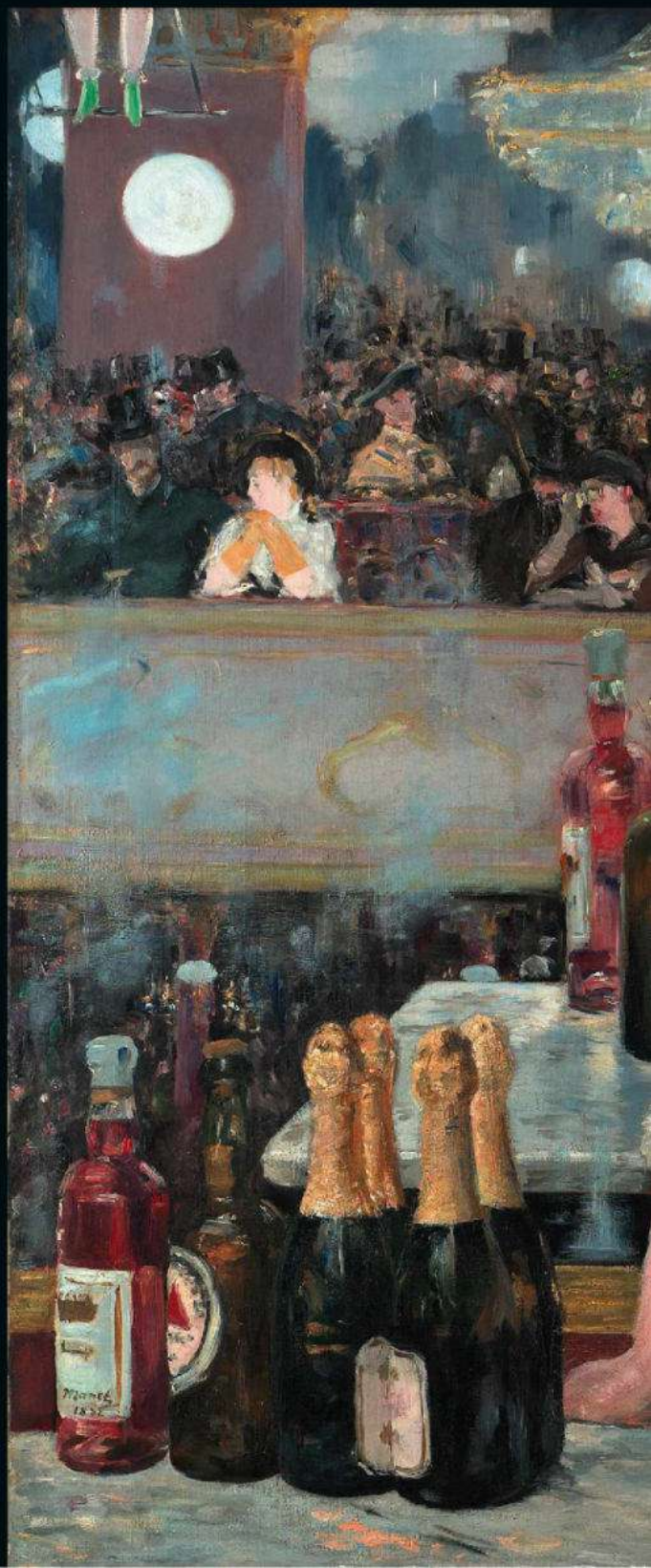
For four decades, the queen of Ndongo, a kingdom in modern-day Angola, stood against the Portuguese, who were attempting to encroach further into Africa to expand the slave trade. She also conquered the neighbouring land of Matamba, personally led her armies into battle until she was in her 70s, and, in the 1650s, eventually brokered a peace.

WHAT GREAT PAINTINGS SAY

A snapshot of 19th-century Parisian nightlife has hints of a darker story lurking just beneath the surface

A Bar at the Folies-Bergère

by Édouard Manet, 1882



Boredom; resignation; weariness; indifference: the expression on the face of the barmaid waiting to take our drink order could be displaying any and all of these emotions. A snapshot, or so it seems, of late 19th-century Parisian nightlife. But are we seeing the full picture?

"*A Bar at the Folies-Bergère* is important for many reasons, not least because it was the last major painting that Manet created before his death in 1883," says Dr Karen Serres, curator of paintings at the Courtauld Gallery in London. "Manet had long been considered a controversial artist, but by 1882, the Impressionist movement had become well-known and Manet's works had become more accepted; this piece was exhibited in the Salon de 1882 – the official annual exhibition of the French Academy of Fine Arts in Paris – where it hung alongside other scenes of daily life. It was very well received, but its complex perspectives and intriguing subject matter show that, whilst his work had become more widely accepted, Manet was still able to confound the artistic establishment."

REFLECTING REALITY

At first glance, the scene appears relatively straightforward. We, the viewer, take on the role of patron at a bar in the Folies-Bergère, then one of most popular places of entertainment in Paris and one that Manet himself frequented regularly. The young barmaid, standing patiently in front of a huge mirror that reflects the fashionable crowd in attendance, awaits our order. But if we cast our eyes to the right of the piece, the perspective, and meaning of the work, becomes less clear cut.

"Since the mirror is positioned behind the barmaid, we would expect her reflection to appear directly behind her," says Serres. "But Manet has seemingly shifted her reflection to the right of the piece, where we can see that she is actually attending to a gentleman in a top hat. When the piece went on show, many assumed that Manet had made a mistake when he created the woman's reflection, while others were convinced that he had painted two barmaids into the work. It's highly likely that Manet disregarded conventional perspective in order to include the interaction between the man and woman – it's hard not to speculate on the nature of their conversation"

Interpretations of the barmaid's enigmatic expression and her role at the Folies-Bergère are also wide-ranging. Her enigmatic expression has seen her described as the Mona Lisa of modern times, but was there more to her job than meets the eye? "There is a theory that Manet painted a bowl of oranges to indicate that the woman is a sex worker," says Serres. "Personally, I don't subscribe to this idea. Contemporary critics identified the fruits as candied and liquor-filled mandarins, a new delicacy at the time, so their inclusion was probably more to do with their novelty than anything else."

Elsewhere, the triangular shape of the corsage on the neck of the woman's gown has been linked to the red triangle stamped on the bottles of ale, with one theory proposing that, much like the beverages on sale, she, too, is a consumable product.

"Manet used a barmaid from the Folies-Bergère, named Suzon, as the model for the piece, setting up a bar scene in his studio. One of the things I find most interesting is that Manet has depicted the excitement of the Folies-Bergère but, by focusing on the people who worked there, has also revealed a darker underbelly to the establishment."

WORDS: CHARLOTTE HODGMAN

GET HOOKED

A Bar at the Folies-Bergère is on permanent show at the Courtauld Gallery, based at Somerset House, London. Visit *courtauld.ac.uk* for more information

LISTEN

BBC RADIO 4

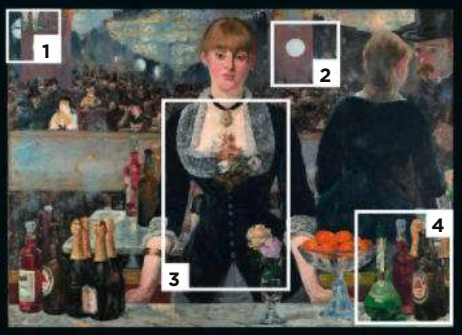
A Bar at the Folies-Bergère will feature on a forthcoming episode of *Moving Pictures*, on BBC Radio 4: *bbc.co.uk/programmes/b09mtb0b*

1. PERFORMANCE
The pair of green shoes belong to a trapeze artist who is performing high above the patrons. Shows at the Folies-Bergère typically included ballet, acrobatics, pantomime, operetta and animal acts.

2. LIGHTING
The bright round lights on the walls are powered by electricity; the Folies-Bergère was among the first public establishments to install electric lighting.

3. FASHION
The barmaid's long black velvet bodice with its cluster of flowers, worn over a grey skirt, is most likely a uniform.

4. BRITISH ALE
The red triangle on the beer bottle marks it as Bass Pale Ale, a luxury beverage at the time, imported from England. Beside the beer bottle is another luxury item: peppermint liquor.



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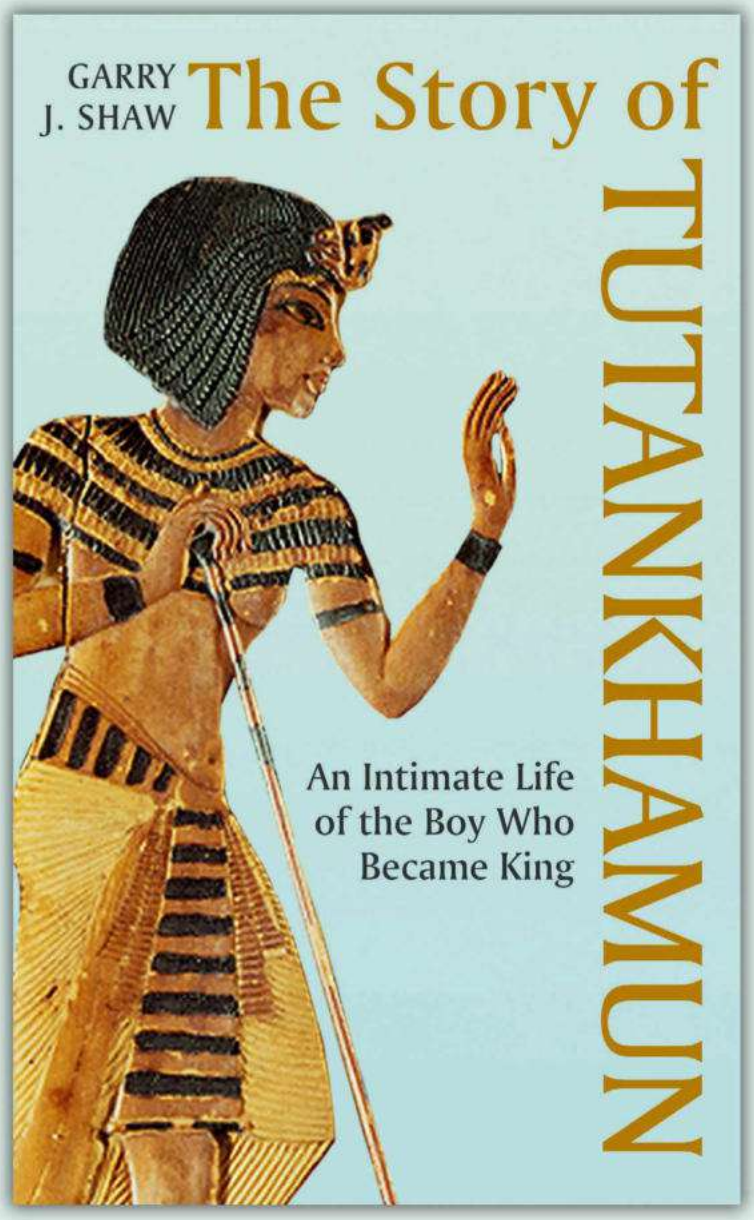
‘This exceptional account brings not only the reign of Tutankhamun back to life, it also shows the ruler in a new light, not only as king of ancient Egypt, but as a human being.’

Christina Geisen, University of Cambridge



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WONDERS OF GOD

In the 19th century, numerous young women on both sides of the Atlantic were alleged to be forgoing food and surviving on faith alone. **Felicity Day** uncovers the secrets of the so-called "fasting girls", whose stories have inspired a new Netflix drama

GETTY IMAGES

A colourised photomontage depicts a young woman on her deathbed in 1858. The "fasting girls" phenomenon of the 19th century resulted in similar scenes being played out in British and American homes

ABOVE: **A drawing of "Welsh Fasting Girl" Sarah Jacob. The 12-year-old gained widespread attention in 1869 when her parents claimed that she had not eaten for two years**

RIGHT: **Fasting girls were not unique to the 19th century. Between 1597 and 1611, Dutchwoman Eve Fleigen was reported as living on the scent of flowers alone**

NEWS DOG MEDIA X1, ALAMY X2, GETTY IMAGES X1

In December 1869, a treacherous experiment was underway in a small village in Wales. Sarah Jacob, her parents claimed, had survived without a single scrap of food crossing her lips for two years. Now, in the face of scorn from the scientific community, they were attempting to prove that their daughter really was a "miraculous faster". But six days into the two-week round-the-clock watch, things weren't going to plan. The nurses, keen eyes primed to detect any attempts at deceit, were growing worried about the 12-year-old. She was getting weaker and colder. In fact, it looked like she was starving to death.

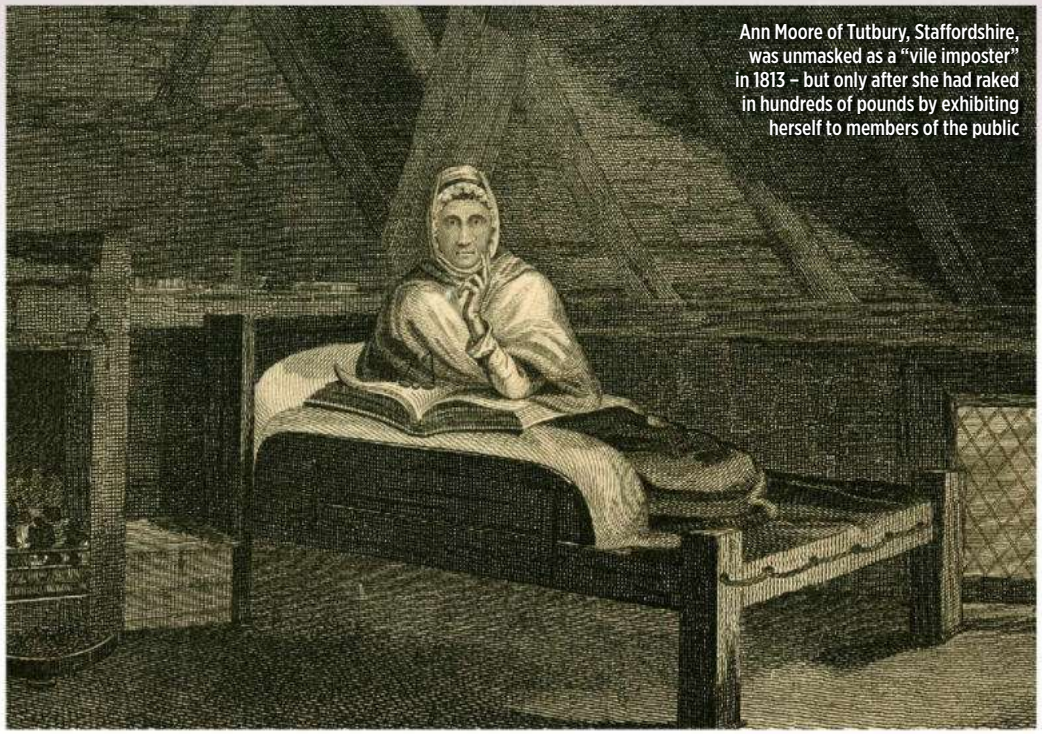
Though newspapers across the nation were avidly following the "extraordinary case", Sarah was not the first so-called "fasting girl" Britain had seen, nor was she the first to submit to such a perilous test. Europe had a long tradition of these miraculous maidens: young women who appeared to eat almost nothing at all, despite being otherwise in good health. Taking their lead from the devout Catholics of the medieval period, whose anorexia mirabilis was rooted in their deep piety, fasting girls had been attracting attention since at least the 16th century, their abstinence bringing them fame and fortune.

FEATHERS AND RAISINS

Even early on, they had divided opinion. To some, they were a "wonder of God" – evidence of his miraculous powers, and worthy of the crowds who flocked to gaze on them. Others were cynical: early modern physicians might not be able to state with any certainty how long a person could survive without eating, but at a time when famine was a bleak reality, the necessity of nourishment for the preservation of life was well-understood.

It was growing scepticism that had led to the very first watches. In 1600, King Henry IV of France sent his "best and chiefest" physician to determine whether it was "by deceit or not" that Jane Balan

had conducted her three-year fast; and in 1668, the Earl of Devonshire arranged for surgeons to watch Martha Taylor, "The Famed Derbyshire Damosell", who claimed to have fasted for 12 months, only occasionally wetting her lips with a feather dipped in water, or drinking the juice of a roasted raisin. The fact that duplicity was not detected in either case (nor in many others) meant that even as physicians were seeking alternative explanations – ranging from bodily make-up to the nutritive properties of air – the idea of miraculous or supernatural abstinence was kept alive.



Ann Moore of Tutbury, Staffordshire, was unmasked as a "vile imposter" in 1813 – but only after she had raked in hundreds of pounds by exhibiting herself to members of the public

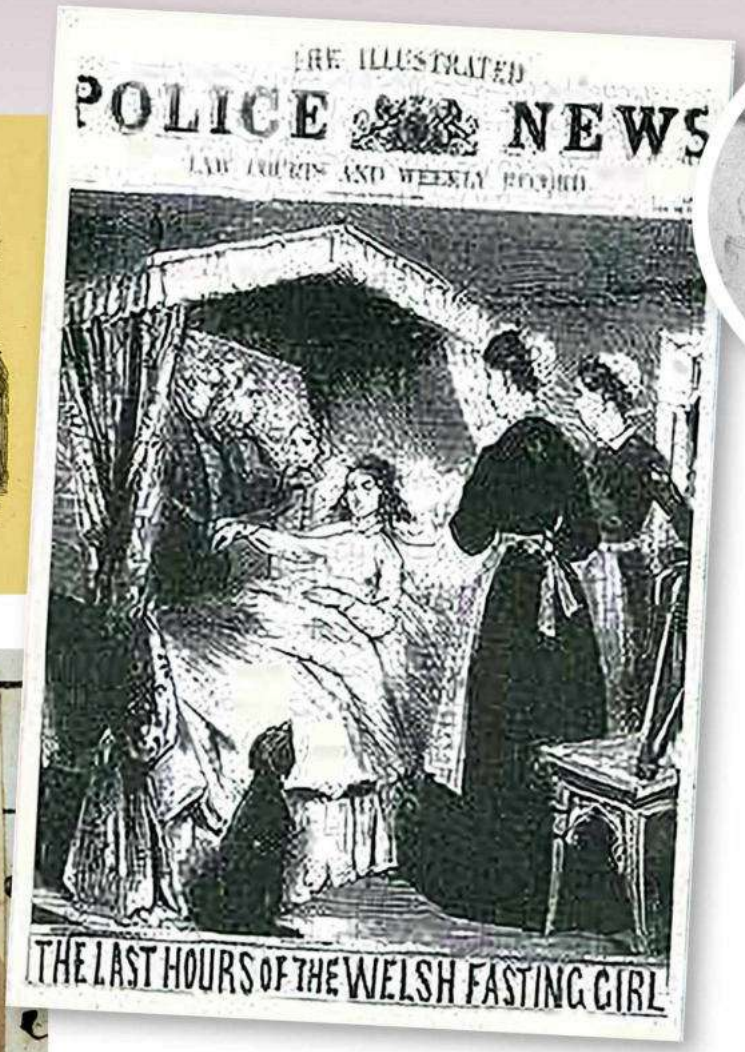
"The majority of physicians were convinced that surviving on air was utterly impossible"

An 1887 image from US publication *The National Police Gazette* shows an inmate being force-fed in prison – a tactic also used on some fasting girls. Prolonged fasting, or the pretence of it, was regarded as a "well-known phase of hysteria" by physicians of the era

Medical knowledge was obviously much advanced by the time Sarah's fast came to the attention of the national press in February 1869. The vast majority of physicians were unshakeably convinced that surviving on air, or staying alive through the mercy of God, was utterly impossible: "a palpable absurdity, and in contravention of all known laws and experience". Already, prolonged fasting – or the pretence of it – was considered a pathological behaviour: "a well-known phase of hysteria". Conventional treatment for food refusal involved admittance to a hospital ward, where "by moral means" the patient would be coaxed into eating, or failing that, force-fed through a tube.

STRANGE PILGRIMAGES

Cases like that of Ann Moore – "the pretended fasting woman of Tutbury" – had done much to damage the credibility of apparently miraculous fasters, too. Despite avowing "that for six years I have taken nothing but once, the inside of a few black currants; [and] for the last four years and a half nothing at all" she had been exposed as a "vile imposter" after a watch in 1813, called off when it became obvious that "she was suffering severely from want" and had "lost weight rapidly". It turned out that while making the tidy sum of £400 from exhibiting her person to visitors, Ann's daughter had been feeding her all along: washing her face with towels made wet with gravy, milk or arrowroot, and passing food into her mother's mouth when they kissed.



Yet despite all that, the fasting girl became something of a Victorian phenomenon. At a time of friction between new scientific fact and traditional religious faith, many ordinary people remained open to the idea that a medical miracle might occur. Not everyone thought it impossible that despite the "mere mention of food" bringing on a fit, Sarah's health could actually be improving. Press coverage led to a steady stream of Britons making pilgrimages to the Carmarthenshire home of the "Welsh Fasting Girl", following the entrepreneurial schoolboys who waited for them at the local railway station. Upon entering the bedroom in which Sarah laid all day, every day, her bed strewn with ribbons, flowers and books, they might be permitted to touch her hands or her face – and, of course, to leave gifts.

So, while the medical community had been reluctant to see an old-fashioned observation conducted on Sarah, fearful of lending credibility to what they believed were ludicrous claims, the experiment to authenticate her fast had been sanctioned. One more rigorous watch, many thought, would prove to the public that it was impossible to survive without sustenance. Four nurses had been sent from London's Guy's Hospital for the purpose, and the Jacobs' home diligently searched for hidden food. Sarah's parents had also agreed not to make her bed, nor let her sister sleep alongside her.

"She apparently ate and drank little more than a small banana and a few teaspoons of milk punch"

Unfortunately, the experiment cost Sarah her life. As she lay in bed, her pulse quickening, her body increasingly cold and restless, and her mind delusional, the doctors had urged her parents to withdraw the watch so that she could begin furtively eating again – as it was painfully clear she had been doing all along. But either from pride, their own delusion or, as they repeatedly said, a promise they had made to Sarah, they refused; and she slipped away on 17 December. The post-mortem categorically confirmed that their assertions that she had taken no food or drink for 26 months were untrue. Amid public outcry, they were both found guilty of manslaughter.

TOP LEFT: **Scores of Britons flocked to visit Sarah Jacob at her Carmarthenshire home before her death in December 1869**

BOTTOM LEFT: **Public outcry over Sarah's fate culminated in her parents, Evan and Hannah, being found guilty of manslaughter**

ABOVE RIGHT: **The case attracted coverage in sensational publications of the day, such as *The Illustrated Police News***

LUCRATIVE ENDORSEMENTS

"It would," thought one US neurologist, "be perfectly possible to re-enact in the City of New York the whole tragedy", since Americans were proving just as receptive to the claims of their own fasting girls. The most famous was Mollie Fancher, who had initially come to the public's attention in 1866 after going "seven weeks without food". By the 1870s, the "Brooklyn Enigma" was apparently eating and drinking little more than a small banana and a few teaspoons of milk punch in a six-month period, and, like Sarah, receiving nationwide attention. Naturally, some of it was highly sceptical – at least one neurologist tried (unsuccessfully) to get Mollie to agree to a 30-day observation – but not all of it. Mollie was offered (and accepted) a lucrative endorsement deal from a company specialising in invalids' prosthetics; and PT Barnum attempted to recruit her for his show. President Woodrow Wilson even sent her a letter to mark her "Golden Jubilee in Bed" in 1916.

Just as other fasting girls were seen and reported on in Britain – like "Strathaven Fasting Girl" Christina

NEWS DOG MEDIA X3, ALAMY X1, AIDAN MONAGHAN/NETFLIX, GETTY Y IMAGES X1

American fasting girl Mollie Fancher, who came to be known as the "Brooklyn Enigma", spent more than half a century in bed

Marshall, who "completed her eighteenth week without food" in 1881 – so were they found across the US, especially in places where supernatural causes were still given credence. In the mid-1880s, over 1,000 people came to visit Kate Smulsey, the "Fort Plain Fasting Girl" who had apparently not eaten for over a year. Maine's Josephine Marie Bedard, meanwhile – said to have "no more desire to eat than other people would have to chew iron" – was fought over by two rival promoters keen to exhibit her as a curiosity.

NEW INTERPRETATIONS

Why exactly Mollie Fancher, Sarah Jacob and those like them began to refuse food (or to eat in secret) has never been clear. Sarah had done so after a mysterious illness involving convulsive fits; Mollie while recuperating after an accident. One Dr Fowler, firmly convinced that hysteria lay behind Sarah's behaviour, thought that "the oft expressed wonderment and surprise" of her parents as to the very little food she lived on in the wake of her illness had encouraged her fasting. The "cultivation of this habit" had in turn brought rewards, leading her into "simulation and deception".

Very rarely were either of their names connected with anorexia nervosa, defined for the first time in the early 1870s and linked then to the psychological dynamics of middle-class family life – in which parents were increasingly attentive towards children – and to Victorian attitudes about female self-restraint when it came to food. Instead, discussions around headline-hitting fasting girls were usually confined to exposing the fraud behind their claims of near-total abstinence, or to a hysteria diagnosis, deceptive behaviour being one of its core symptoms.

Even more recently, historians have been wary about labelling them anorexics. Symptomatic continuities such as fasting and secret eating can be misleading according to Joan Jacobs Brumberg, author of the 1989 book *Fasting Girls: The History of Anorexia Nervosa:* "just because a behaviour occurs across cultures or time does not necessarily mean that it has the same cause or that it is biologically based."

What is clear is that the Victorian age was a pivotal period, transforming fasting girls from sources of fascination to sufferers; and their lengthy periods of abstinence from possible miracles to medical symptoms.

FELICITY DAY is a journalist specialising in British history and heritage. Her first book, *The Game of Hearts: The Lives and Loves of Regency Women*, was published by Blink Publishing in September 2022

GET HOOKED

WATCH

A film adaptation of Emma Donoghue's 2016 novel *The Wonder*, inspired by the stories of real-life fasting girls in Europe and the US, is available to stream on Netflix from 16 November

Florence Pugh (*left*) and Kíla Lord Cassidy in the 2022 Netflix adaptation of Emma Donoghue's novel *The Wonder*. Inspired by real-life cases, the drama tells the story of a fasting girl in 19th-century Ireland

ANOREXIA MIRABILIS IN THE MIDDLE AGES

The first references to fasting girls can be found in accounts from medieval Europe

Meaning "miraculously inspired loss of appetite", the term anorexia mirabilis describes the religiously motivated self-starvation of women in late medieval Europe, some of whom allegedly went without food for months or years, claiming that they were physically unable to eat "earthly fare". Like feasting, fasting was a central tenet of the Catholic faith, but the refusal (or inability) to eat was closely entwined with female piety. Women's cultural association with food, and the nurturing of both their family and the poor, made it their most accessible resource for expressing their desire to share in Christ's sufferings, and for achieving holiness through the service of others.

Saint Catherine of Siena (1347–80) remains one of the most famous adherents: until her death from a stroke at the age of 33, she was one of numerous women who reportedly lived on the Eucharist alone, pushing twigs down her throat to make herself vomit if she was forced to eat anything else. Her strict fasting she described as an infirmity, saying she prayed God would make it possible for her to eat. It did, however, enable her to avoid marriage and earned her a notoriety that facilitated her intervention in major political and religious crises.

Dominican mystic Caterina Benincasa, who was later canonised as Saint Catherine of Siena, exhibited an extreme form of anorexia mirabilis

WHAT IF... ALFRED HAD LOST THE BATTLE OF EDINGTON?

Professor Ryan Lavelle and **Nige Tassell** consider the future shape and make-up of England had the king of Wessex lost a crucial battle to the Vikings in 878

King Alfred was far from successful in his early battles against the Danes. Shortly after succeeding his brother Æthelred as ruler of Wessex in 871, he was forced to make a fragile peace by paying the invaders to leave the kingdom, only to suffer further incursions over the next few years.

But by 878 and the battle of Edington, Alfred was sufficiently powerful to be able to force the Danes, led by the future king of East Anglia, Guthrum, into a modest retreat across the border into neighbouring Mercia. In the process, Alfred regained the stronghold of Chippenham, and a subsequent programme of fortress building managed to keep future Danish aggression at bay. These were tactics that would come to influence later Saxon leaders, including his children Edward and Æthelflæd, aka 'Lady of the Mercians'.

Whether a different Wessex king could have achieved this success is up for scrutiny. Ryan Lavelle – professor of early medieval history at the University of Winchester and the author of *Alfred's Wars: Sources and Interpretations of Anglo-Saxon Warfare in the Viking Age* (Boydell, 2010) – suggests that "perhaps Alfred had more drive than other rulers at this point in his life, but we don't know if another ruler in the same position would have done better.

"Perhaps he had skills as a negotiator. The peace in 871 was bought with money, and knowing when to purchase peace and how it could be negotiated was an important thing. Any ruler could buy peace if they had the wealth, but I suppose the thing here might be that Alfred knew it was a good time to do so in 871 and to regroup."

DID YOU KNOW?

SIBLING SUCCESSION

King Alfred was the son of King Æthelwulf of Wessex and his wife Osburh. However, three of his elder brothers – Æthelbald, Æthelberht and Æthelred – each ruled in turn as king before Alfred reached the throne in 871.

That regrouping, during which time Alfred probably recruited more warriors, laid the foundations of the victory at Edington. Were he not so organised, Guthrum's westward expansion may have met little resistance. Had the Danes taken control of all of Wessex, would there have been much opposition from the West Saxons or other Anglo-Saxons? Might they have organised to repel these interlopers?

"Some sort of national uprising would have been unlikely," explains Professor Lavelle. "The English after 1066 didn't manage this when there had been decades of nominally national rule, so I don't think we can expect groups of people who weren't bound in any political fashion to have managed it in the circumstances of Alfred having been hammered at the battle of Edington."

RELIGIOUS COEXISTENCE?

By the same token, a unified 'Daneland', whereby the regions under Danish control forged a federation or even a single state, was unlikely. "Although the Viking 'Great Army' is given a sense of unity by the West Saxons' *Anglo-Saxon Chronicle*, it was a diverse bunch with different leaders and different interests, so the possibility exists that the 'heptarchy' of pre-Viking England could have continued for much longer, with a patchwork of territories.

"Different Viking leaders might have disposed of the puppet leaders they'd installed, but I don't think they would have done it with the greater aim of creating some kind of 'Daneland'. However, this possibility would have been in the minds of the West Saxons and the Mercians in 878."

Even if a post-Edington control of Wessex by the Danes was unlikely to lead to the unification of various

IN CONTEXT

Seven years into his rule as king of Wessex, during which he suffered frequent Viking incursions, Alfred's troops met the forces of the Danish leader Guthrum at the battle of Edington. His victory was highly significant, not least because Wessex was the only Saxon kingdom that hadn't succumbed to Viking control. Furthermore, not only did it mark the beginning of Wessex's heavy fortification, protecting Alfred's subjects from future invasions, but it also fostered peaceful relations due to Alfred's insistence that Guthrum's Christian baptism be a key clause of the post-battle Treaty of Wedmore. Overall Scandinavian control of each and every Saxon kingdom had been averted.

After his defeat, Guthrum was baptised and became king of East Anglia

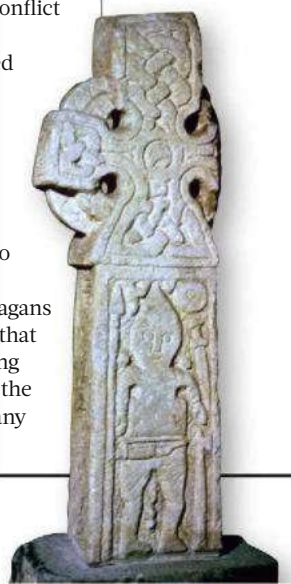
GETTY IMAGES X4, BRIDGEMAN X1

Well over a thousand years after his death, King Alfred's legacy still looms large. This statue of the Anglo-Saxon ruler stands in Winchester – the former 'capital' of his kingdom

The battle of Edington pushed the Vikings out of Wessex and enabled Alfred to strengthen his kingdom against future incursions – although, unlike this 1950s depiction of the clash, the Vikings would not have worn helmets with horns

ABOVE: **Viking efforts to invade Wessex by sea were thwarted by King Alfred's men**

BELOW: **An Anglo-Scandinavian cross at a church in Middleton, Yorkshire. Vikings quickly adopted Christianity in the places they settled**



kingdoms, Viking culture would nonetheless have come to bear on the West Saxons. One clear cultural difference concerns religion, with the Scandinavians' paganism seemingly at odds with the Christianity of the natives. Certainly the outlawing of the latter belief would have profoundly altered the course of English history. But Professor Lavelle sees less conflict here than might be imagined.

"Vikings very quickly adopted Christianity in the places in which they settled. It suited Danish rulers to cooperate with existing networks of Christian authority, and while some of the Vikings may have been explicit in their hostility to Christianity, the variety of gods worshipped by Scandinavian pagans at this time would have meant that there was room for Christ among those gods. Also, I suspect that the networks of trade on which many Vikings relied would have meant that absolute hostility to Christianity was off the cards."

"THE CORE PURPOSE OF HUMAN INTERACTION AND SOCIETY WOULD HAVE SURVIVED, EVEN BETWEEN DANE AND SAXON"

A CHANGING LANDSCAPE

Other Viking cultural influences might have included how life subsequently *looked*. For instance, Professor Lavelle imagines "the building of Viking great halls in the downlands of the English countryside". Indeed, with Alfred's programme of fortress construction only taking effect post-Edington, "perhaps the shape of English towns would have looked different as a result".

That said, the core purpose of human interaction and society would have survived, even between Dane and Saxon, as Professor Lavelle concludes. "The needs of towns as places for people to gather, to exchange news, to trade and sometimes to worship would have been the same, and to be part of a network linked to the sea was also important during the early medieval period. We can surely expect the Vikings to have shared the same interests." ⊙

VISIT

Professor Ryan Lavelle is the historical advisor for 878 AD, a new visitor attraction in Winchester inspired by the story of King Alfred's victory at Edington. To find out more, see *878ad.co.uk*

NEXT MONTH

What if Napoleon had conquered Russia?

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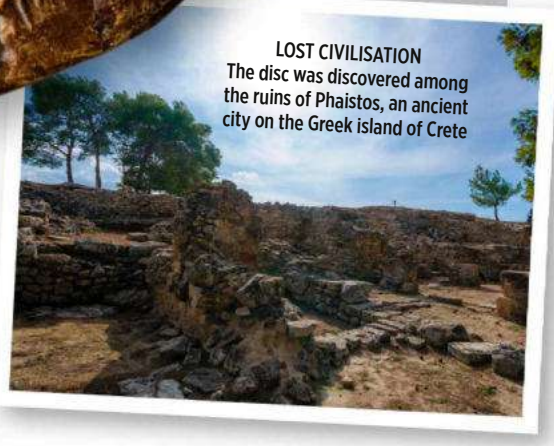
250

The approximate number of shrapnel shards that lodged in the body of American marine Jack Lucas when he threw himself onto two grenades in 1945. He survived.

WHAT A DISC-OVERY
The Phaistos Disc features 242 symbols arranged in a spiral, but no one has been able to work out the message – if there is one, that is



LOST CIVILISATION
The disc was discovered among the ruins of Phaistos, an ancient city on the Greek island of Crete

What is the importance of the Phaistos Disc?

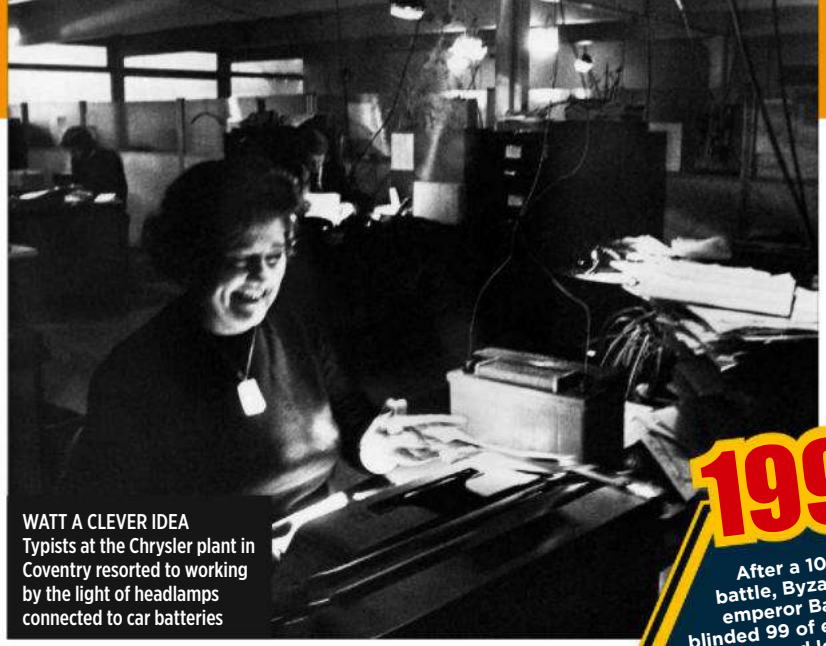
SHORT ANSWER The ancient treasure may be the key to unlocking an unreadable script, if it can ever be deciphered

LONG ANSWER Much like the Rosetta Stone – which ended up being a rather dry royal decree – it is not what the Phaistos Disc recorded that's important, but the challenge the artefact has inspired to decipher its symbols and so read an unreadable script. The fired clay disc, around 16cm in diameter, was made by the Minoans, a Bronze Age civilisation on the Mediterranean island of Crete, and when discovered in 1908 by Italian archaeologist Luigi Pernier, it was dated to 1850–1550 BC.

Stamped on its surface like an old printing press are 242 symbols in a spiral: human figures, birds, plants, weapons, ships, beehives and combs, as well as dots, dashes and lines separating the pictures into groups. Their meaning has been debated ever since. While some share similarities to another Minoan writing system, Linear A, experts don't even know if they are pictographic or alphabetic.

There are theories, of course. Some people claim that the Phaistos Disc displays a hymn to a goddess or perhaps a fertility ritual, while others say the artefact is simply an elaborate fake that has successfully duped everybody for more than a century. Until a Minoan Rosetta Stone is unearthed, we may never know.

GETTY IMAGES X1, ALAMY X1



WATT A CLEVER IDEA
Typists at the Chrysler plant in Coventry resorted to working by the light of headlamps connected to car batteries

199

After a 1014 battle, Byzantine emperor Basil II blinded 99 of every 100 prisoners and left the last man with one eye, so taking 199 out of every 200 eyes.

Why did Britain have a three-day week?

SHORT ANSWER The measure was to conserve power; instead, it led to the Tories losing it

LONG ANSWER Miners' strikes, union tensions, fuel crises, rising prices: early 1970s Britain faced severe political and economic hardships. Not wholly unlike current times, it could be said. In order to keep the lights on, Edward Heath's government introduced a three-day working week to conserve coal stocks used to generate electricity.

From 1 January 1974, businesses could only use power on three consecutive days a week, with hospitals, supermarkets and printing presses exempt. Cities went dark, companies sat idle or closed, and people worked by candlelight and wrapped themselves in blankets to keep warm.

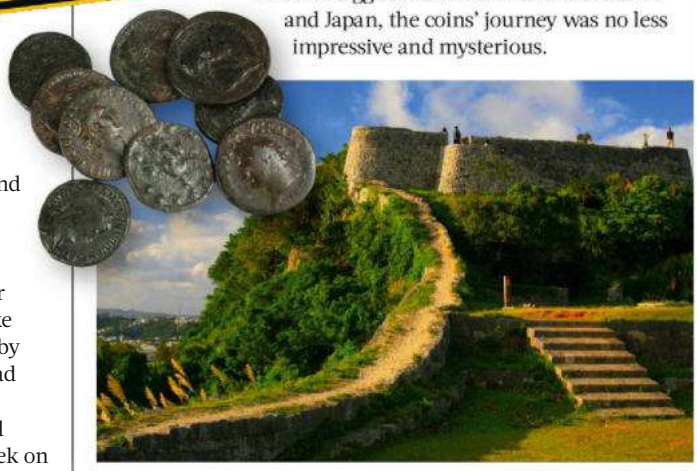
It lasted for two hard months, during which many people lost their jobs. When the miners voted to strike again in retaliation, Heath gambled by calling a snap election, hoping he had support among the voters, and lost. Labour came to power under Harold Wilson and ended the three-day week on 7 March. Despite this, it left a troubled legacy for many years to come.

How far have Roman coins been found?

SHORT ANSWER More than 6,000 miles from the heart of the empire, underneath a castle

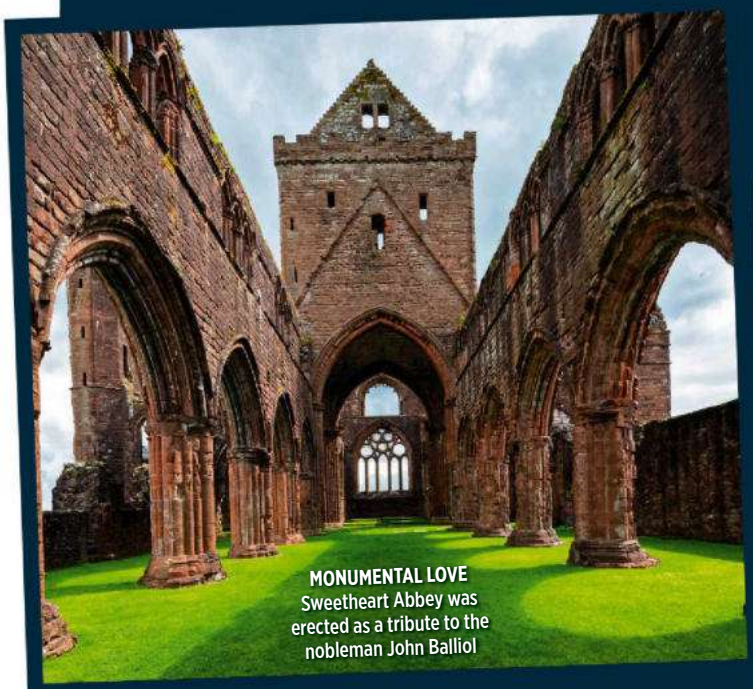
LONG ANSWER The reach of the Romans was far indeed, with an empire stretching from the Middle East to northern Britain, and trade networks sending their influence as far afield as China. As a result, coins have been discovered in India and Sri Lanka, but, in 2016, news broke of a baffling find that threw yet another country into the mix: Japan.

An excavation at the medieval-era Katsuren Castle in Okinawa – more than 6,000 miles from Rome – unearthed Roman coins dating to around the fourth century AD. They had badly eroded during their time beneath the castle foundations, so X-ray analysis was needed to reveal that some bore the image of Emperor Constantine I. While this doesn't suggest a direct link between Rome and Japan, the coins' journey was no less impressive and mysterious.



LONG WAY FROM ROME
A stash of Roman coins was found beneath Osaka's historic Katsuren Castle

GETTY IMAGES X5, ALAMY X2



MONUMENTAL LOVE
Sweetheart Abbey was erected as a tribute to the nobleman John Balliol

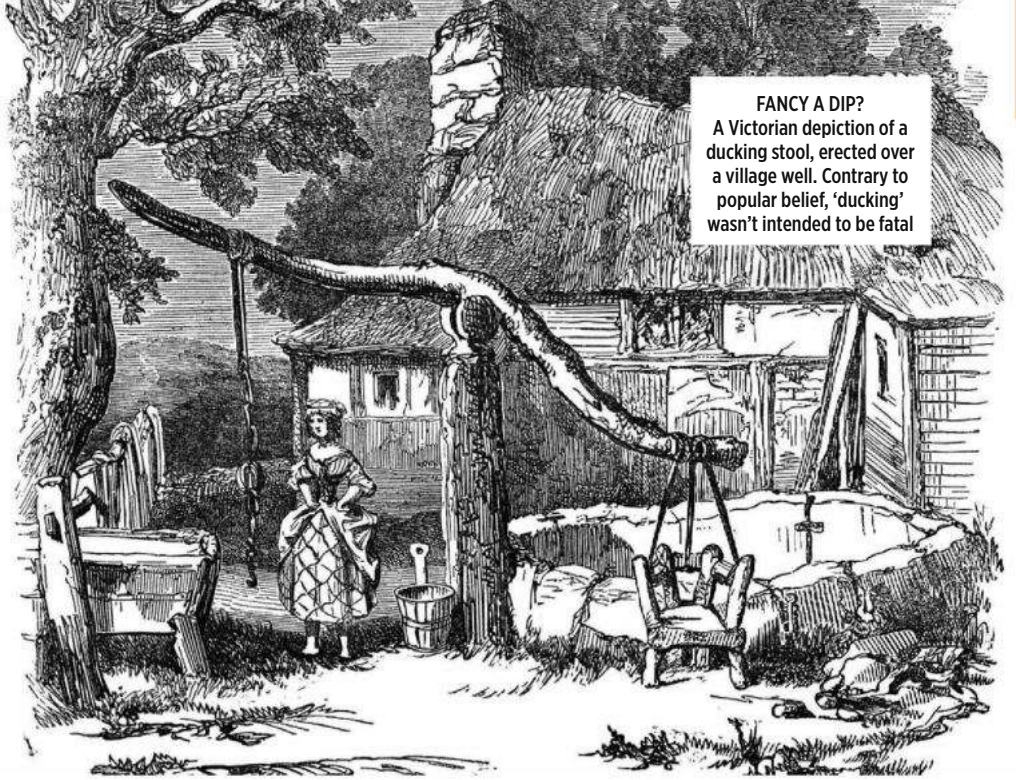
Why is it called Sweetheart Abbey?

SHORT ANSWER A gravestone or statue wasn't enough for one grieving widow

LONG ANSWER Near Dumfries in the south of Scotland sits the picturesque 700-year-old ruins of Sweetheart Abbey. It is remarkable any of it survives at all given all the border wars between the English and Scots, and the downfall of Catholic religious houses following the Protestant Reformation.

It had been founded in 1273 by Dervorguilla of Galloway, in honour of her husband. John Balliol – a noble who ended up having an Oxford college named after him – died in 1268, leaving his widow inconsolable with grief. She continued to have food served at his place at the table (before distributing the meal to the poor) and preserved his heart in an ivory-and-silver casket, which she carried around with her. The abbey was an even grander gesture, especially when she named it Dulce Cor ('Sweet Heart').

When Dervorguilla died in 1290, she was buried at Sweetheart Abbey with John Balliol's heart still clutched to her bosom.



FANCY A DIP?
A Victorian depiction of a ducking stool, erected over a village well. Contrary to popular belief, 'ducking' wasn't intended to be fatal

Were ducking stools different from cucking stools?

SHORT ANSWER One was a more extreme version of the other, but neither were used to test accused witches

LONG ANSWER The ducking stool has become ubiquitous with the hunting of witches: the suspect, nearly always a woman, was tied to a chair at the end of a beam and dunked in a body of water. Floating back up meant she was guilty, while sinking proved her innocence (although, now drowned, unable to enjoy the acquittal). In reality, while the ducking stool and its forebear the cucking stool were a way to punish women throughout medieval times, it wasn't the go-to for witches.

A cucking stool was used more like the stocks or pillory, for misdemeanours such as disturbing the peace, dishonest trading and occasionally sexual offences like prostitution. The offender was tied to a chair and put on public display to be humiliated. The practice started with the Saxons and persisted until the early 19th century, when women could still be sentenced as a "common scold".

Meanwhile, the ducking stool was a punitive step up: a good dunking was seen as an appropriate measure to teach a troublesome scold a real lesson. It was not intended to be fatal, although the shock of cold water and the risk of drowning meant it could be. For rooting out witches, it was satisfactory just to tie a rope around them… then throw them in a river for the classic float/sink test.

DID YOU KNOW?

WRITING PENN

The American polymath Benjamin Franklin printed currency for the colonies, but purposely misspelled "Pennsylvania" in order to trick counterfeiters. Any bill with the correct spelling would be instantly revealed as a fake.

FLEET OF FOOT

In January 1795, the French cavalry rode into battle… against the Dutch navy. The ships had become stuck when their anchorage froze over, allowing the horses to approach over the ice. The captains of all 14 ships surrendered.

READ MY LIPS!

Lipsticks sold to beauty-conscious women in 16th-century England included shades with names such as ape's laugh, horseflesh, chimney sweep, smoked ox, the devil in the head and dying monkey.

SOOTHING MUSIC

The 19th-century medicine, Mrs Winslow's Soothing Syrup, was used as a cure-all for babies, despite containing enough morphine to kill them. Regardless, composer Edward Elgar still named a piece for wind quintet after it.

Did pirates say "shiver me timbers"?

SHORT ANSWER We ARRRR-en't sure. It was a pretend pirate from a novel who popularised the phrase

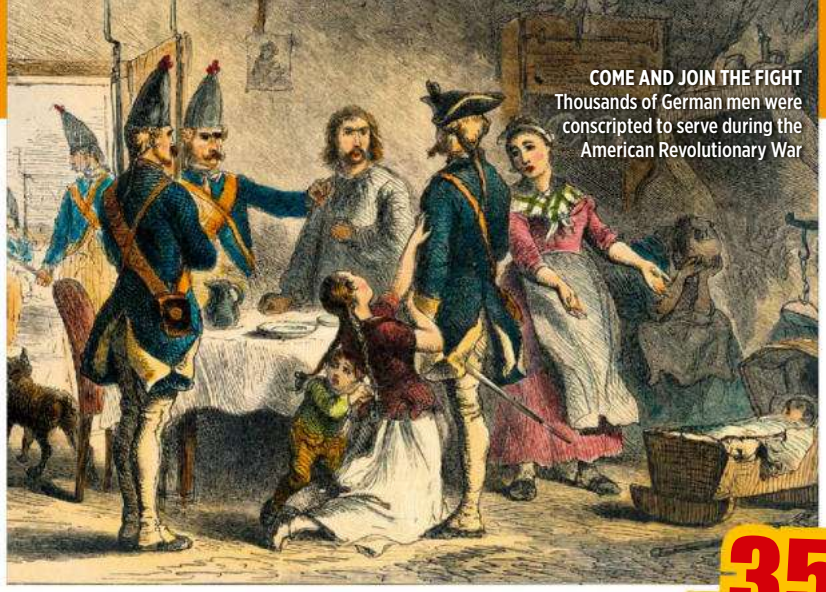
LONG ANSWER There's a lot about pirate lore that originated not in the golden age of piracy itself, but in Victorian novels – chiefly, Robert Louis Stevenson's seminal *Treasure Island* (1883). The black spot (a pirate death sentence), for example, was his idea, and the dastardly antagonist Long John Silver belts out "shiver me timbers", or a variation, a number of times. In the case of the latter, though, Stevenson was not the inventor.

The phrase – alluding to when a ship shudders, or shivers, when hit by a wave or cannon fire – appeared earlier, notably in Frederick Marryat's 1834 novel *Jacob Faithful*: "I won't thrash you, Tom. Shiver my timbers if I do." Unfortunately, there is no way to confirm whether it was an authentic piratical exclamation.

What was 'knocker wrenching'?

SHORT ANSWER A bit of fun, or a bizarre fad for Victorian vandalism?

LONG ANSWER In Georgian and Victorian times, door knockers became ornate displays of status. Unluckily for the owners, they were also targets for the anti-social fad of knocker wrenching. People, often from the wealthier sections of society, found it jolly to twist, pull and yank off a door knocker and make a quick getaway. In 1896, Lord Charles Beresford attempted to wrench the dolphin-shaped knockers belonging to the Marquis of Bath by tying one end of rope to them and the other to a waiting cab. According to the resulting newspaper report, the cab ripped off the panels of the door along with the dolphins.



COME AND JOIN THE FIGHT
Thousands of German men were conscripted to serve during the American Revolutionary War

Why were Hessians in America?

SHORT ANSWER Less a matter of "life, liberty and the pursuit of happiness", more about money and work

LONG ANSWER During the American Revolutionary War, around 30,000 German soldiers fought on the side of the British. The Patriots weren't happy about it. In fact, the use of "large armies of foreign mercenaries" was one of the grievances against King George III in the Declaration of Independence. But it was pretty common at the time for many German states to hire out its military forces as a decent earner. In the War of the Austrian Succession (1740–48), Germans were hired by both sides and ended up fighting each other.

In America, the well-trained Germans – referred to as 'Hessians' as the majority came from Hesse-Cassel and Hesse-Hanau – proved a real asset to the British cause, becoming instantly spottable to the Americans as they fought under their own flags and in their own uniforms. When the war was over, however, thousands of these men chose to stay in the victorious United States.

35

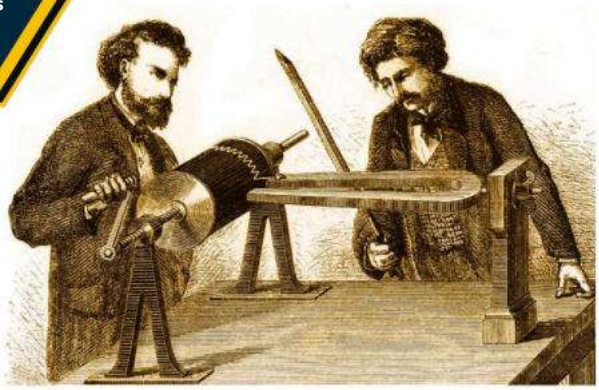
The number of skulls measured by British mathematician Alice Lee to debunk the idea that men were smarter due to having larger heads. The smallest skulls, she found, were of the most renowned scientists at the Anatomical Society.

What is the oldest-surviving sound?

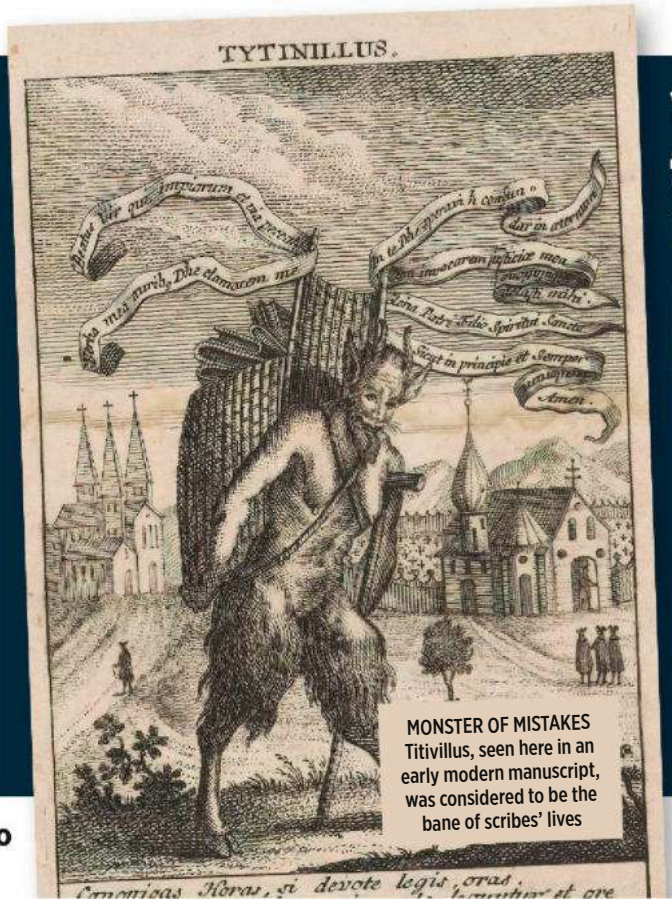
SHORT ANSWER In 1860, a French inventor made history with a snippet of a song

LONG ANSWER Some 20 years before Thomas Edison presented his phonograph to the world, a French inventor named Edouard-Leon Scott de Martinville patented a device to record sound. His phonautograph transcribed sound waves onto paper or glass, essentially creating a visual representation of the vibrations. On 9 April 1860, he tested it by recording a performance of the folk song 'Au Clair de la Lune'.

The only problem was that his phonautograph recorded sound as a wiggly wave, with no way of playing it back. It needed 21st-century technology. When discovered in 2008, the phonautogram was converted into a digital file at the Lawrence Berkeley National Laboratory in California, and, for the first time ever, the oldest recorded sound in history was heard. To be honest, it's quite eerie.



GIVE US A LITTLE WAVE
An illustration depicts Edouard-Leon Scott de Martinville and a colleague using a phonoautograph to record the sound waves produced by a tuning fork



MONSTER OF MISTAKES
Titivillus, seen here in an early modern manuscript, was considered to be the bane of scribes' lives

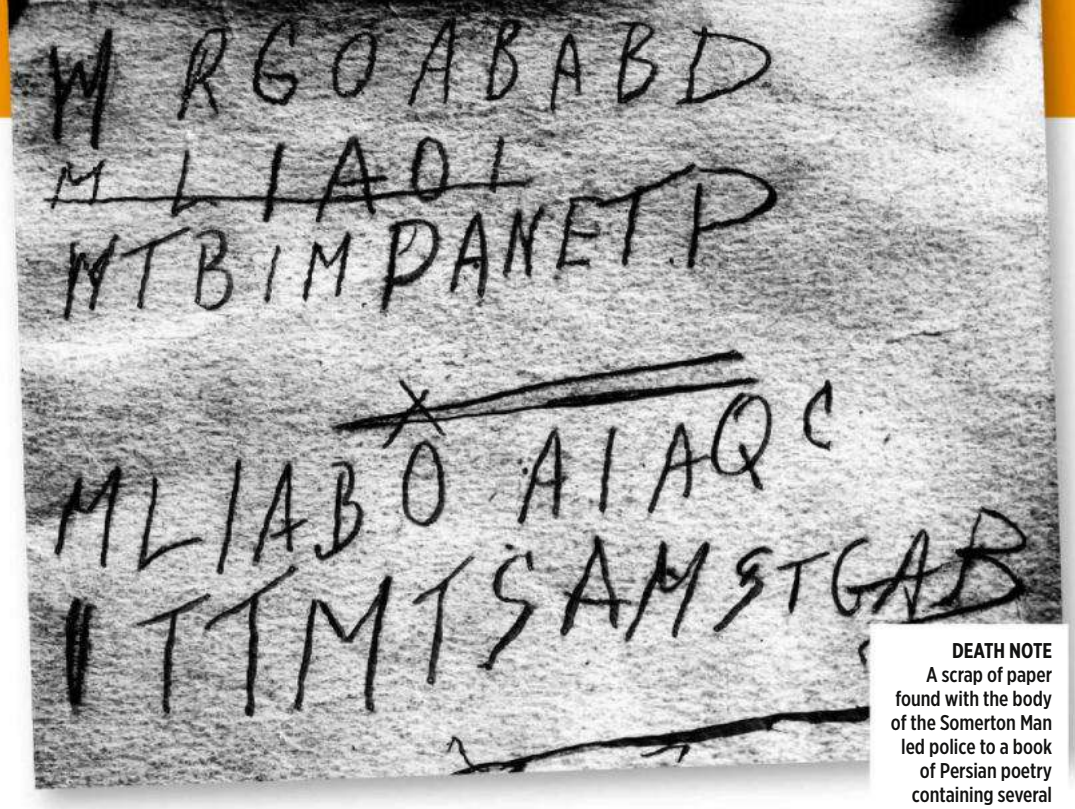
What did Titivillus have to do with medieval manuscripts?

SHORT ANSWER Top tip for a scribe: if you make a mistake, blame it on Titivillus

LONG ANSWER The creation of a manuscript with perfect handwriting and exquisite illuminations was a painstaking task for a scribe, and errors were bound to creep in occasionally. When they did, the meticulous medieval monks either had to redo the page or, much easier, blame a demon. Titivillus was the 'patron demon of scribes', a hideous monster sent by the Devil to entice those copying out a document to make a mistake. He also hung around churches collecting bits of gossip or fluffs in the services.

The earliest-known mention of Titivillus appears in a late 13th-century work by John of Wales, and despite the advent of the printing press it seems that the demon kept finding work well into the 20th century. By then, he had developed a good grasp of irony, it seems: for 50 years, the *Oxford English Dictionary* apparently contained a mistake in the entry about, you guessed it, Titivillus.

GETTY IMAGES X4 ALAMY X2



DEATH NOTE
A scrap of paper found with the body of the Somerton Man led police to a book of Persian poetry containing several cryptic messages

Who was the Somerton Man?

SHORT ANSWER The 70-plus-year mystery of the corpse on an Australian beach may have been solved earlier this year...

LONG ANSWER On the morning of 1 December 1948, a body was found on a beach at Somerton Park in Adelaide, Australia. Aged between 40 and 50, the dead man was well dressed, with travel tickets and various items in his pockets, and a cigarette on his collar. However, the cause of death was not clear, and there were no clues whatsoever to his identity. Even checking his fingerprints on databases around the world revealed nothing about the so-called Somerton Man.

Amid a growing media circus, any leads the police did find just made the case more baffling. In his pocket was a torn scrap of paper bearing the words "Tamam Shud", or "Is finished" in Farsi, ripped from a book of 12th-century Persian poetry. When this was later discovered, other pages were covered in what were believed to be coded messages. Was he a Russian spy? Many thought so.

But in July 2022, a University of Adelaide academic, Professor Derek Abbott, claimed he had solved the mystery with genealogist Colleen M Fitzpatrick. DNA analysis of hairs taken from a plaster death mask from the time had whittled down the candidates to just one: Carl Webb, an engineer from Melbourne who vanished in 1947. That doesn't explain how he ended up dead on that beach, though.

Why does chess end with 'checkmate'?

SHORT ANSWER The influence of the Persian love of the game can still be seen

LONG ANSWER While the first chess moves were made in India, the game-ending declaration of 'checkmate', signalling that an opponent's king cannot escape being taken, was an addition as the game spread in popularity in Persia. There, it was called Shatranj, and the rules were tweaked so a player warned their opponent that defeat was inevitable. This was done with 'shah mat', meaning 'the king is helpless'. The rule stuck and appeared in around 14th-century France as 'eschec mat', which then evolved into 'checkmate'. That is not the only memento of Shatranj: the name of the rook comes from the Persian word 'rukh' (chariot).

WORD GAME
'Checkmate' is derived from the French term 'eschec mat', which itself originates from 'shah mat' – Farsi for 'the king is helpless'

Who is the patron saint of the internet?

SHORT ANSWER Technically, no one is yet. Saint Isidore of Seville, however, holds the unofficial honour

LONG ANSWER It may not seem an obvious choice, but the protecting saint of a technology that forever changed the world in the 20th century is often said to be a bishop of the seventh century. Saint Isidore of Seville was a scholar with a bold mission: to compile as much human knowledge as possible.

The result was his *Etymologiae* ('Origins'), a huge encyclopaedia on everything from grammar and language to medicine, law, religion and war. That's not all: he had chapters on space, animals, stones, metals, agriculture, ships, houses and clothes too. It goes on and on.

Until the Renaissance, his 20-volume magnum opus was a chief reference book in Europe. Perhaps it's not that surprising then that in the 1990s a group of Catholics equated Isidore's achievement to the internet, and while Pope John Paul II agreed, he didn't go all the way in the patron-saint-naming process.

SAINTLY SCHOLAR
Isidore of Seville, seen here in stone at a church in Paraguay, had an incredible thirst for knowledge

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Written by *Peaky Blinders* creator Steven Knight, *SAS Rogue Heroes* charts the World War II origins of Britain's most famous special forces unit

ONE TO WATCH

Connor Swindells, seen here between Alfie Allen (*left*) and Jack O'Connell (*right*), plays SAS founder David Stirling

Desert warriors

SAS Rogue Heroes /
BBC One & BBC iPlayer, starts Sunday 30 October

In the early months of 1941, the British situation in the fight against Germany and Italy was perilous. At the same time as the Luftwaffe pummelled Britain's cities during the Blitz, the war in North Africa, crucial to protecting supply lines, was going badly. How were troops from Britain and its empire going to turn the situation around?

One unconventional young commando officer had a bright idea. David Stirling (1915–90) reasoned that a small group of highly trained soldiers, travelling rapidly using mechanised transport, could cause havoc behind enemy lines by attacking several targets over the course of a single night as they criss-crossed the desert. Thus the Special Air Service (SAS) was born.

In précis, this seems a simple story. In reality, as a new six-part drama from *Peaky Blinders* creator Steven Knight, makes clear, it's testament to Stirling's inability to take no for an answer that the SAS ever came into being. In a series based on Ben Macintyre's book, also called *SAS Rogue Heroes* and which saw the author gaining an unusual amount of access to the SAS archives, it goes on to tell the story of how Stirling and his colleagues pioneered a new kind of guerrilla warfare – largely by engaging with the enemy.

It was a time when, to quote Knight, "a sort of madness and irrationality" won out. "The people who were the outsiders, the people who would not have thrived in a conventional peacetime situation, suddenly became the people who were changing things," he tells *BBC History Revealed*.

Connor Swindells (best known for the Netflix series *Sex Education*) heads a largely young cast as Stirling, whom we first meet resolutely refusing to show any respect to his long-suffering commanding officer, Major Knox, played in deadpan fashion by the comedian Miles Jupp. The most familiar face in the cast is Dominic West, who stars as Lieutenant Colonel Wrangel Clarke (1899–1974), a pioneer in military deception techniques.

BBC PICTURES X2

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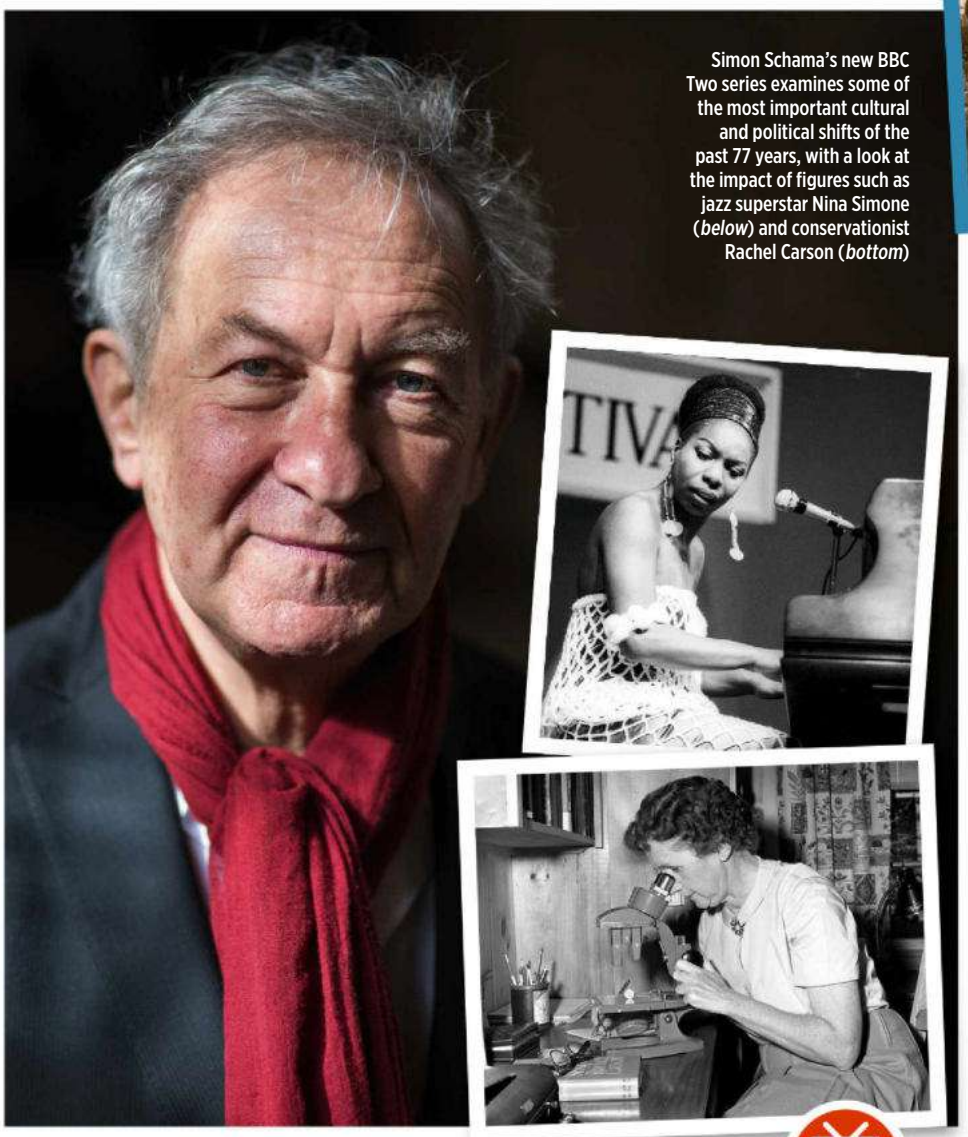
A new BBC World Service documentary retraces the footsteps of a former slave in the Sierra Leonean capital of Freetown, seen here in c1880



Simon Schama's new BBC Two series examines some of the most important cultural and political shifts of the past 77 years, with a look at the impact of figures such as jazz superstar Nina Simone (*below*) and conservationist Rachel Carson (*bottom*)

Here and how we got here

Simon Schama's History of Now / BBC Two & BBC iPlayer, November

On 13 February 1945, the day historian Simon Schama was born, the Allied bombing of Dresden began. He grew up as part of a cohort who were determined to rebuild a world torn apart by conflict. Seen from the perspective of 2022, how have his generation and those who followed done?

In a highly personal three-part series that takes viewers up to the present day, Schama explores how artists, writers and musicians have fought for ideals that so many hoped would become embedded in the world order: democracy, equality and the dream of plenty.

Art, music and literature are central to Schama's story, in keeping with his idea that the culture we create can have a political impact. That's especially true of the figures whose work he explores, who include George Orwell, Czech playwright-turned-politician Vaclav Havel, singer and songwriter Nina Simone of 'Mississippi Goddam' fame, libertarian novelist Ayn Rand and conservationist Rachel Carson, author of *Silent Spring*, one of the first books to alert people to environmental issues.

Each programme deals with a different theme. The opener looks at democracy and truth, while the second considers struggles for equality. Schama concludes by looking at tensions over whether societies should follow a social democratic road or embrace a harder form of capitalism. Schama himself, who, for example, spent time in the American South during the civil rights era, sometimes adds in first-hand reflections.

Look out too for longer versions of interviews with several contemporary figures featured in the series: novelist Margaret Atwood, artist Ai Weiwei and Pussy Riot's Nadya Tolokonnikova (BBC Four).

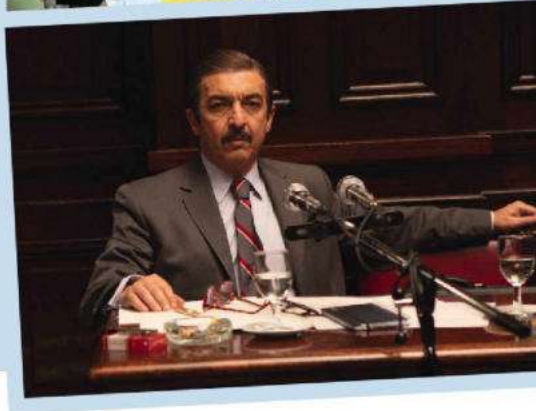
A colonial story

The Documentary: Recaptive Number 11,407 / BBC World Service & BBC Sounds, Tuesday 25 October

Discovered in Sierra Leone, the *Registers of Liberated Africans* offer biographical sketches of those the Royal Navy freed from the slave trade in the early 19th century. Not just the former prisoners' names, but the scars on their bodies, their places of origin and where they ended up.

Looking at these registers, one entry particularly caught the attention of deaf poet Raymond Antrobus: "Recaptive Number 11,407, Deaf and Dumb, Without Name". Who was this freed captive?

On the trail of 11,407, Antrobus learns how many liberated Africans had to endure "apprenticeships" that were little better than slavery. He also travels to the city of Freetown, where he learns how 11,407 would have faced prejudice because of his deafness. The idea that this is a British story shedding new light on the colonial past runs through the documentary.



GETTY IMAGES X5, NETFLIX X3

Time of change

The Crown / Netflix, streaming from Wednesday 9 November

Perhaps surprisingly in the wake of the death of Queen Elizabeth II, Peter Morgan's drama about the Windsors returns for a penultimate fifth series. This time around, the story moves into the 1990s, a time when the Queen (now played by Imelda Staunton, part of a wholesale recasting to demonstrate the passing of time) is shown as reflecting on her decades in power at a time when, with the fall of the Soviet Union and China preparing to retake control of Hong Kong, the world is in flux.

Inevitably, the disintegration of the marriage between Charles (Dominic West) and Diana (Elizabeth Debicki) features heavily.

Also joining the series five cast are Jonathan Pryce as Prince Philip, Lesley Manville as Princess Margaret and Jonny Lee Miller as John Major, who served as Britain's prime minister between 1990 and 1997.

The penultimate series of *The Crown* sees Imelda Staunton (*above*) taking on the role of Queen Elizabeth II, with Dominic West and Elizabeth Debicki (*left*) playing Charles and Diana during the very public collapse of their marriage

MORE ONLINE
Discover the real-life stories behind every episode of *The Crown* to date by visiting the *HistoryExtra* website: *historyextra.com/crown-real-history*

Truth to power

Argentina, 1985 / Amazon Prime, streaming from Friday 21 October

Courtroom drama *Argentina, 1985* reveals how a young team of lawyers, led by veteran prosecutor Julio Strassera (played by Ricardo Darín, *left*), finally brought Argentina's military junta to justice

In the wake of defeat in the Falklands War in 1982, a time when the country was mired in an economic depression, Argentina's military junta began to fall apart. On 30 October 1983, the country went to the polls to elect a new president and democracy returned.

But what was to be done about the generals who had overseen the repression of Argentina, the years of the so-called Dirty War when thousands were killed or disappeared, and then led it into a disastrous conflict? The answer was to put them on trial.

Which is precisely what happened when prosecutor Julio Strassera (1933–2015) led a team that tried nine senior figures from the junta. These were men such as General Jorge Videla (1925–2013), who became de facto president after the ousting of Isabel Perón (b1931) in 1976. In the dock for human rights abuses, they haughtily refused even to recognise the authority of a civilian court.

In a fine dramatisation based on these real events, the story of the trial plays out as a David-and-Goliath story. While the young team led by Strassera has the backing of the new president, this is a country traumatised by the recent past, and where sections of society don't want to believe the generals did anything wrong.

Ricardo Darín gives a fine performance as Strassera, a veteran lawyer who has questions to answer about why he didn't speak up earlier, while Peter Lanzani plays his deputy, the idealistic Luis Moreno Ocampo (b1952).

Explosive issue

Fallout: Living in the Shadow of the Bomb / BBC Radio 4 & BBC Sounds, starts Friday 14 October

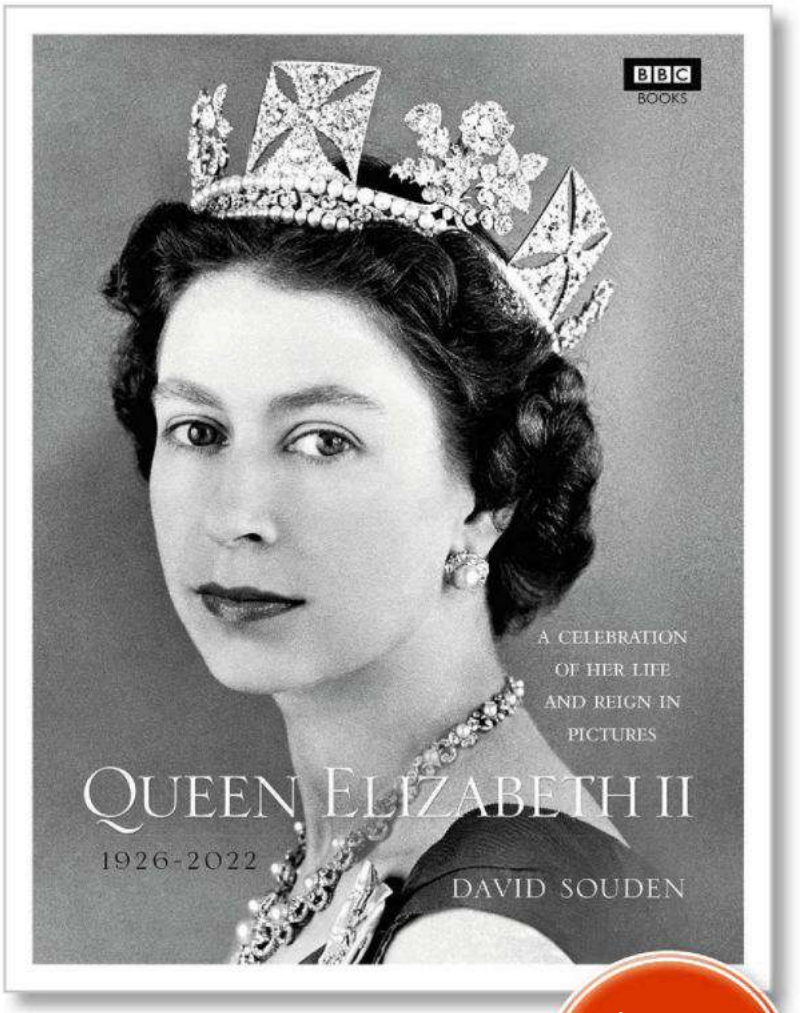
In 2021, an art installation, *An English Garden*, was removed from Gunners Park in Southend. It was a deceptively simple work that consisted of benches and flowerbeds planted with atom bomb roses, a variety dating from the Cold War. A plaque on one of the seats described Britain as a country with a "historical and ongoing identity as a colonial nuclear state".

It was created by Australian artist Gabriella Hirst and was intended as a reflection on Britain's hydrogen bomb programme, which saw it testing thermonuclear weapons in South Australia. Conservative councillors, one of whom called the work "a left-wing rant", threatened to take legal action unless it was dismantled.

Whatever your thoughts about what happened, it's a vivid illustration of how Britain's nuclear past plays into the present. As this five-part series explores, those who were close to the blasts – including Indigenous people and soldiers who weren't issued with protective clothing – are still grappling with the fallout from the tests.

BOOKS & PODCASTS

THIS MONTH'S BEST HISTORICAL READS AND LISTENS



BOOK OF THE MONTH

Queen Elizabeth II: A Celebration of Her Life and Reign in Pictures

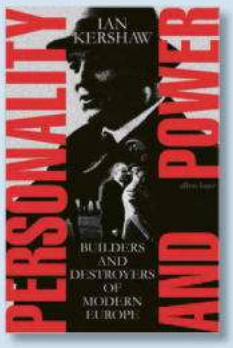
By David Souden
BBC Books, £22, hardback, 240 pages

This beautifully presented visual history pays tribute to the late Queen Elizabeth II through a selection of almost 200 photographs, many of which are drawn from the BBC's extensive archives. Spanning the full length of the Queen's life, from her first days to this year's Platinum Jubilee, it's accompanied throughout by expert commentary from curator and historian David Souden. A fitting portrait of not just the Queen's reign, but also of an entire era of British history.

Personality and Power: Builders and Destroyers of Modern Europe

By Ian Kershaw
Allen Lane, £30, hardback, 512 pages

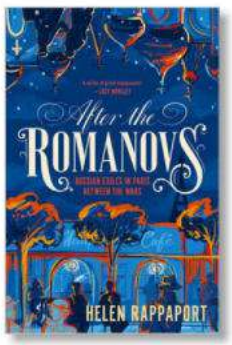
This look at 12 leaders who transformed Europe – for better or worse – is emphatically not a set of mini-biographies. Instead, these concise, incisive studies explore whether figures including Lenin, Churchill and Gorbachev had such an enormous impact because of their personalities, or because of the wider political conditions and structures of the time. Each ends with a consideration of the way in which their legacies shaped the continent for years to come. Typically masterful stuff from one of history's foremost experts.

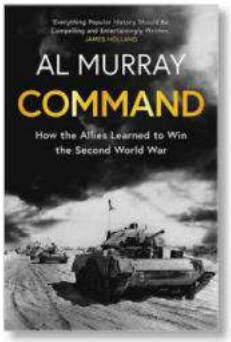


After the Romanovs: Russian Exiles in Paris Between the Wars

By Helen Rappaport
Scribe, £20, hardback, 336 pages

What happened to the people who fled the unrest that followed 1917's Russian Revolution? That's the question at the heart of this joint biography, which follows some of those émigrés as they headed to Paris, drawn by its ideas, its culture – or simply its ability to provide a safe haven. Some found success, while some struggled to make ends meet or intensely missed their homeland. All are compellingly sketched in Helen Rappaport's evocative, and often moving, book.





Command: How the Allies Learned to Win the Second World War

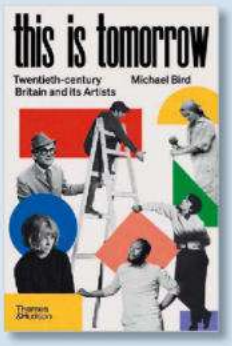
By Al Murray
Headline, £20, hardback, 352 pages

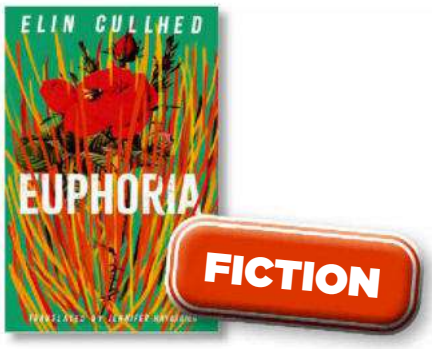
You may be more familiar with him as a comedian, but Al Murray is also fascinated by World War II – as his *We Have Ways of Making You Talk* podcast, co-hosted with historian James Holland, attests. Here he charts the story of the Allied military effort, focusing on how its leaders and commanders coordinated soldiers to secure victory on the ground. It's as lively as you'd expect, but also combines an accessible overview of often complex operations with insightful profiles of the central figures.

This is Tomorrow: Twentieth-Century Britain and its Artists

By Michael Bird
Thames & Hudson, £30, hardback, 352 pages

If talk of Hockney, Hepworth, Whistler and Whiteread leaves you feeling more jumbled than an abstract painting, this book is for you. Writer, broadcaster and curator Michael Bird chronicles the development of British 20th-century art through the lives of some of its key artists, and the ways in which their experiences of class, injustice, war and dislocation influenced their work. In so doing, it also offers a creative-tinged history of the wider forces that buffeted the nation across the course of decades.





Euphoria

By Elin Cullhed
Canongate, £16.99, hardback, 304 pages

Nearly 60 years on from her death, American poet and writer Sylvia Plath continues to captivate. This historical novel, newly translated from its original Swedish, imagines the hopes, fears, dreams and memories of her final months, as well as the growing tensions between the worlds of creativity and domesticity. Based on archival research but explicitly a work of fiction, Elin Cullhed's book aims to focus not on Plath's death but instead on the complexities and contradictions of her life.

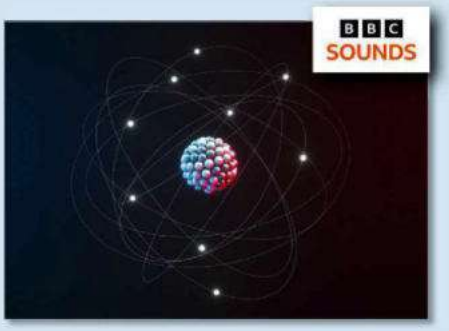
PODCAST WHAT TO LISTEN TO...

Each month we bring you three of our favourite podcasts from the BBC and HistoryExtra

Roman Women's Lives

bit.ly/RomanPod114

How easy was it for women to be financially independent in ancient Rome? How much did their experiences differ according to their social status? And what would childbirth have been like? Those are just some of the questions tackled by Professor Kate Cooper in this instalment of *HistoryExtra*'s 'Everything You Wanted to Know' series, which puts popular internet search terms and listener queries to leading experts.



In Our Time: The Electron

bbc.in/3CtrS9k

When British physicist JJ Thomson first detected the existence of electrons in 1897, it revealed that what had been thought of as the smallest things in the universe were, in fact, made of even smaller things. This episode of long-running BBC series *In Our Time* looks back at that monumental discovery, and the ways in which it has shaped our understanding of the world in the decades since.

Colouring in Britain

bbc.in/3fC7pGi

This new BBC series sets out to reframe British history by including the stories of people often omitted from conventional narratives. Each episode profiles a specific individual, from 1960s civil rights activist Paul Stephenson (*pictured*) to pioneering nurse Princess Campbell. Along the way, Tomi Dixon and his guests consider the reasons why these stories have been left out, and who decides what constitutes 'history'.

GETTY IMAGES X3

EVENTS & EXHIBITIONS

WHAT TO SEE AND WHERE TO VISIT IN THE WIDER WORLD OF HISTORY

MUST SEE

© THE ESTATE OF MICHAEL ANDREWS - TATE/PHOTO: MIKE BRUCE/COURTESY GAGOSIAN, GETTY IMAGES X1

EXHIBITION

Friends and Relations: Lucian Freud, Francis Bacon, Frank Auerbach, Michael Andrews

Bringing together the private and public collections of works by painters Lucian Freud, Francis Bacon, Frank Auerbach and Michael Andrews, this major exhibition charts the friendship and progress of these luminaries of postwar British art. As the greatest collector of his friends' works, the exhibition distinguishes Freud as the group's core figure, and showcases the artists as sitters and painters of one another. Portraits of their relatives and lovers, alongside photographs of the quartet over the years by their friend, Bruce Bernard, make for an unmissable retrospective.

PAID ENTRY Gagosian, London, 17 November 2022–28 January 2023, *gagosian.com*

EXHIBITION

Transitions in Print

Housing one of the greatest collections of 15th-century European printing in the world, this exhibition at the John Rylands Library in Manchester invites the public to discover how scientists, historians and imaging specialists are applying state-of-the-art techniques to shed new light on the infancy of the medium.

PAID ENTRY John Rylands Library, Manchester, 12 October 2022–18 March 2023, *library.manchester.ac.uk*

EVENT

The Three Curses of Tutankhamun

The discovery of King Tutankhamun's tomb a century ago glamorised archaeology and the public appetite for history. In this open lecture, Dr Juliette Desplat from the National Archives will explore the 'three curses' that the tomb's discovery unleashed: intense popularity, political blunders and ancient dark magic.

FREE ENTRY Sir Victor Blank Lecture Theatre, Weston Library, Oxford, 19 November 2022, *visit.bodleian.ox.ac.uk*

EXHIBITION

The Afterlife of Mary Queen of Scots

More than 400 years after her death, Mary, Queen of Scots continues to command attention. Combining a series of objects and archival material, the Hunterian seeks to interrogate the shifts in Mary's posthumous reputation, as well as her enduring cultural impact and presence in Scottish collective memory.

FREE ENTRY Hunterian Art Gallery, Glasgow, until 5 February 2023, *gla.ac.uk/hunterian*

CROSSWORD

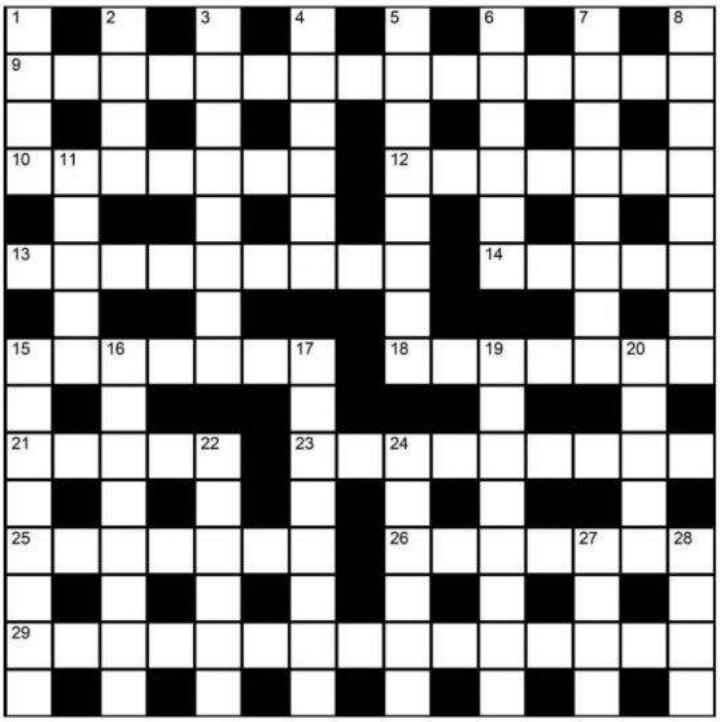
TEST YOURSELF WITH OUR HISTORICAL PUZZLE EVERY ISSUE

CROSSWORD No. 114

Test your history knowledge to solve our prize puzzle – and you could win a fantastic new book

ACROSS

9 *The* ___, 1881 novel by Henry James (8,2,1,4)
10 "The ___ are rather a foul-mouthed nation" – William Hazlitt, 1822 (7)
12 Husband of Eurydice, in Greek myth (7)
13 ___ War, Arab-Israeli conflict of October, 1973 (3,6)
14 Nina ___ (1883–1970), Turin-born French fashion designer (5)
15 '___ of Europe', epithet originally given to the Ottoman empire (4,3)
18 Terry Waite or Brian Keenan, for example (7)
21 Indigenous peoples of the Arctic (5)
23 West Midlands football stadium opened in 1897 (5,4)
25 VS ___ (1932–2018), Trinidad-born novelist (7)
26 Wisconsin city, ravaged by fire in 1875 (7)
29 Quaker asylum in Philadelphia, founded in 1813 (7,8)

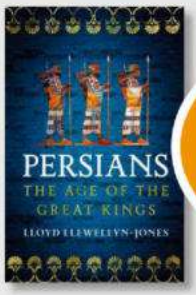


Set by Richard Smyth

DOWN

1 Recess, in church architecture (4)
2 Diluted rum, formerly dispensed to Royal Navy sailors (4)
3 Ancient religion of Britain (8)
4 Elizabeth ___ (1911–79), US poet (6)
5 One of the ill-fated Cities of the Plain, biblically (8)
6 Rajasthan capital, known as the Pink City (6)
7 Medieval kingdom of southeast Spain (8)
8 Historic county of Scotland, associated with Robert Burns (8)
11 In the Old Testament, the mother-in-law of Ruth (5)
15 Vodka brand founded in Moscow in 1864 (8)
16 Christian symbol (8)
17 Official directory of naval officers (4,4)
19 James ___ (d1721), soldier and First Lord of the Treasury (8)
20 *Les* ___, 1957 George Cukor film, with music by Cole Porter (5)
22 *Mallard* and the *Flying Scotsman*, say (6)
24 ___ Fini (1907–96), Argentinian surrealist painter (6)
27 Savoyard knight de Grandson or statesman von Bismarck, perhaps (4)
28 Prison ___, floating gaol (4)

CHANCE TO WIN



BOOK WORTH £25 FOR THREE WINNERS

Persians: The Age of the Great Kings
by Lloyd Llewellyn-Jones

HOW TO ENTER

Post entries to **BBC History Revealed, December 2022 Crossword, PO Box 501, Leicester, LE94 0AA** or email them to **december2022@historyrevealedcomps.co.uk** by noon on **1 January 2023**.

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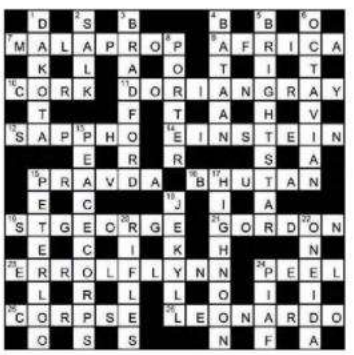
SOLUTION Nº 112



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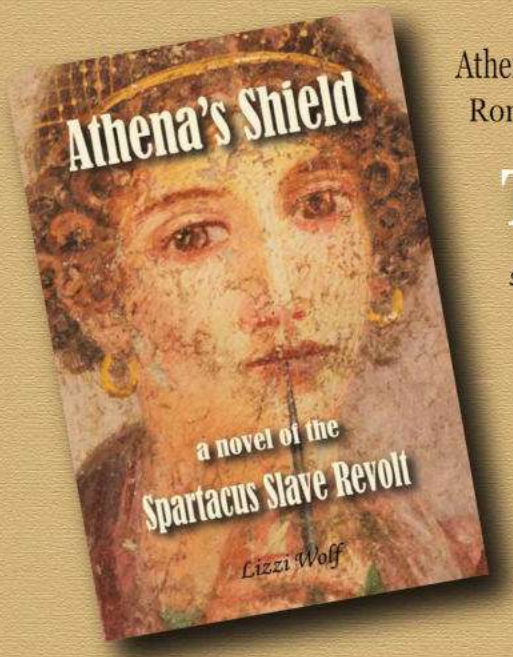
Great book club reads!

New Historical Fiction by Lizzi Wolf



Athena's Shield: A novel
Rome 73 B.C.E.

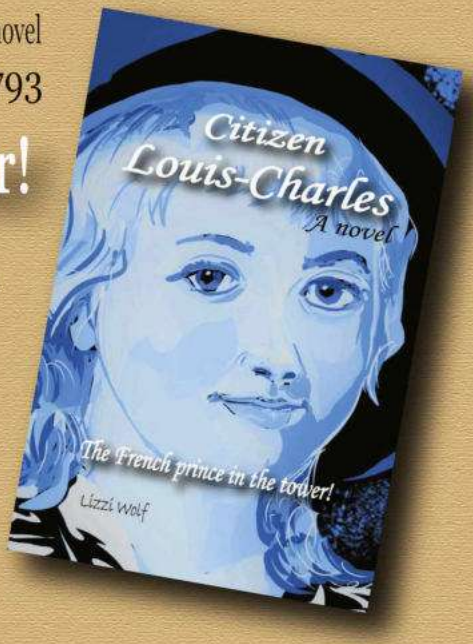
The Spartacus Slave Revolt

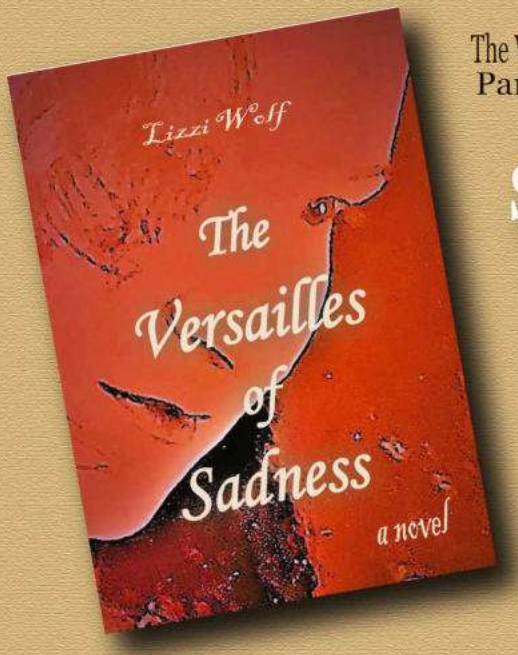
seen through the eyes of a teenaged girl --
daughter of the famed gladiator and
rebel leader Spartacus --
as she and her friends carry
out missions of reconnaissance,
espionage, and sabotage.

Citizen Louis-Charles: A novel
Paris 1793

The French Prince in the tower!

As he endures the brutal consequences of his father's
misguided reign, 8-year-old King Louis XVII --
the youngest child of Marie Antoinette
and Louis XVI -- wonders why the French people
hate his parents, and how he can rise above their
moral failings.





The Versailles of Sadness: A novel
Paris 1885

A young woman is committed to the

Salpetriere insane asylum

and subjected to a panoply of experimental
methods for the treatment of hysteria.
Will the irritable-looking Viennese
medical student help her to escape
from this Hell?

Available on Amazon.

NEXT ISSUE

··· ON SALE 24 NOVEMBER ···

THE RESTORATION

Step inside the court of Charles II and explore his 25-year reign as the Merry Monarch – from science and culture, to religious unrest and revenge for his father's murder

PLUS... AN A–Z OF MEDIEVAL CHILDHOOD THE ADVENTURES OF EXPLORER ISABELLA BIRD **IN A NUTSHELL: THE SOVIET UNION** EIGHT THINGS YOU (PROBABLY) DIDN'T KNOW ABOUT KING GEORGE II **WHAT IF... NAPOLEON HAD CONQUERED RUSSIA?** AND MORE...

CROSSWORD WINNERS

The three lucky winners of the prize crossword in issue 111 are as follows:

S Buchalter, Greater Manchester
R Fraser, Highlands
A Nicholls, Hertfordshire

Congratulations! You've each won a copy of *The Greek Myths That Shape the Way We Think* by Richard Buxton.

We will post your prizes out as soon as possible.

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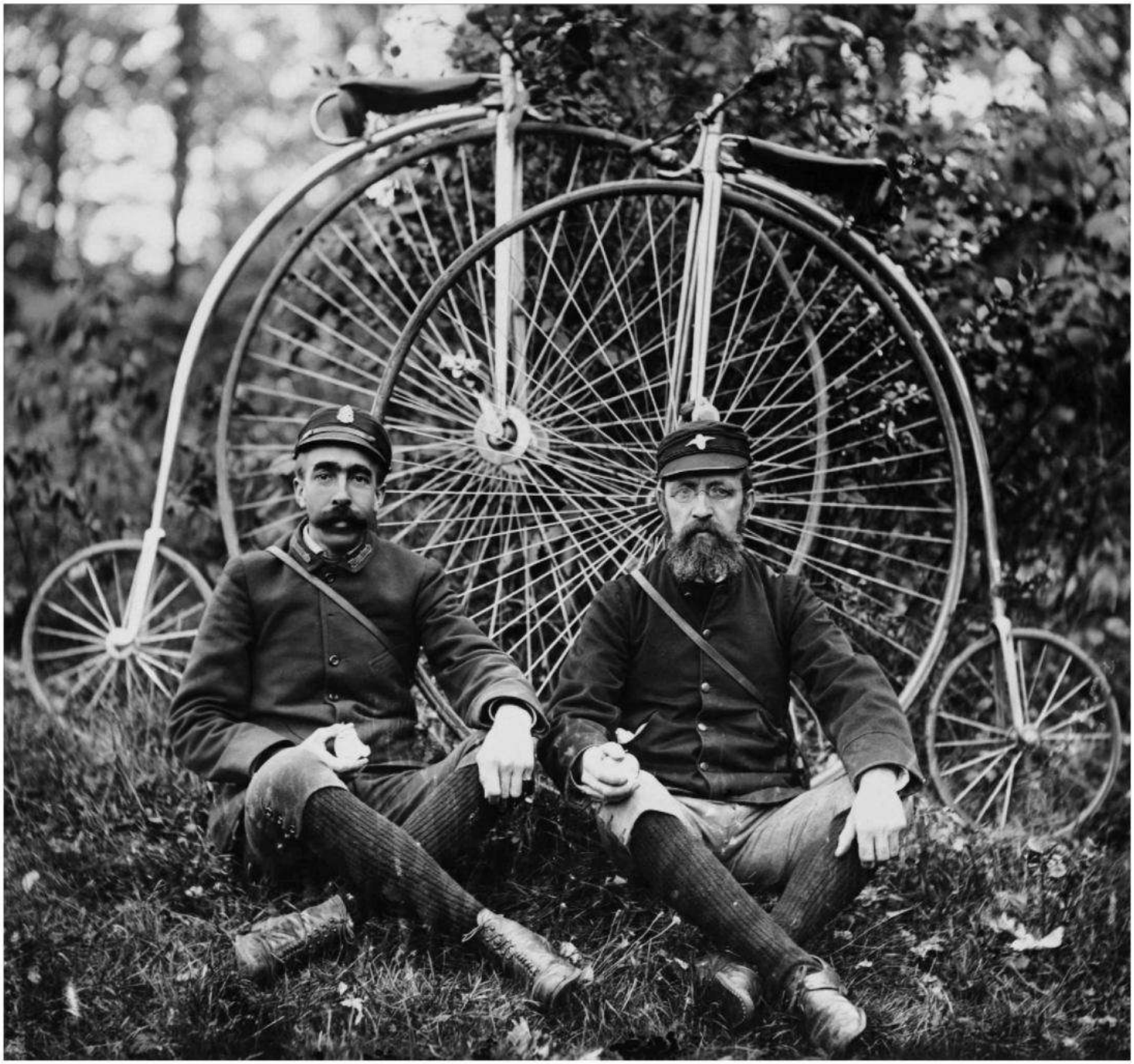

GETTY IMAGES

WHERE THERE'S A WHEEL, THERE'S A WAY c1900

Today's growing advocacy for cycling, be it for leisure or the daily commute, is nothing new. The League of American Wheelmen was founded in 1880 in Newport, Rhode Island, with the aim of promoting the humble bicycle's many benefits to the public. Early enthusiasts included magnates like John Jacob Astor and John D Rockefeller. However, those who took to the saddle (including riders of the 'high wheeler', or penny-farthing, seen here), found themselves navigating uneven roads and the ire of wagon drivers and pedestrians. Seeking to improve riding conditions, more than 100,000 cyclists across the United States lobbied for paved roads. In an era before motorised vehicles, the League proved instrumental in laying the foundations of America's highway system.

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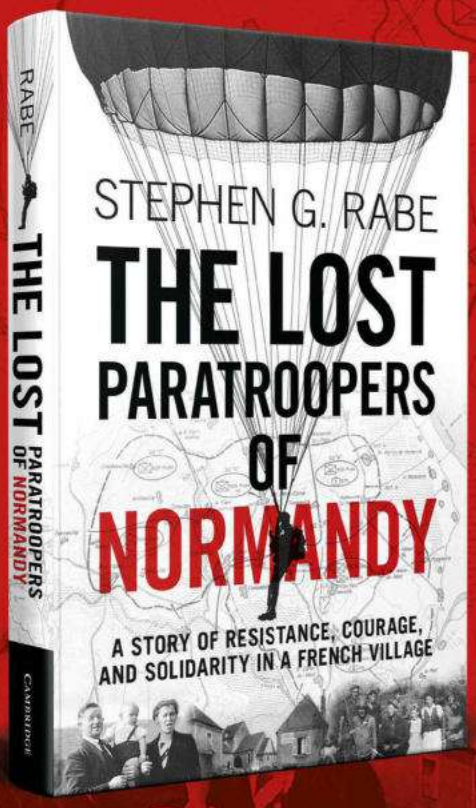
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